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PHILOLOGICAL GLEANINGS.

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NO. IV.

Conceptions of the mind present themselves either as accompanied, or not accompanied, with a sense of objective reality. If they are not so accompanied, they are mere creatures of the *imagination:* if they are so accompanied, then the object producing them is past; they are conceptions of *memory*, and if yet to come, of *expectation;* but, when the object is present, the conception becomes a *perception*, whether it be of an external thing, or of a general notion, or of an idea.

We have hitherto spoken of the faculty of conception, by which the mind gives its thoughts their separate forms; but we have next to see them put into action, and rendered as it were, living and operative. Thoughts and opinions come to us in the mass; and it is by developing them into their constitutional parts, that we ourselves understand them; but in order to communicate them to others, we must pursue the contrary process; we must state the parts, and *assert* their union. *Assertion*, then, is the faculty, which we have next to consider: it is, as it were, the uniting or joining together of two thoughts, and pronouncing them to be one. Hence the word, which expresses that function of the mind, is called by some writers, the *copula* or bond; but in common Gram-

mars, the *verb:* and we rather adopt the latter term, because the former may be apt to lead to the erroneous conclusion, that the mind in assertion, passively contemplates two thoughts as united, whereas, it is active in declaring that union, as it were, by its proper authority; an authority, indeed, often exercised, hastily and amiss, but still the proper act of the mind itself. Conception, then, forms *nouns*, including under that term *substantives*, *adjectives*, and even *participles;* but these nouns lie dead and inoperative to any purpose of reasoning, till they are vivified by the verb, which pronounces their existence to be a truth. Thus *John*, *existing*, *good*, *loving*, are all perfectly intelligible as conceptions of the mind; yet so long as they stand alone, we see not what use is to be made of them in reasoning; but let us introduce the verb, and a truth immediately *flows* from the mind, whence possibly some etymologists might derive *rama*, the verb, and *reor*, to think, from *reo*, to flow. Thus we say, "John exists," "John is good," "John loves," and each of these assertions at once takes the form of a truth, and becomes, as will be hereafter shown, the germ and seed of other truths in the mind.

To assertion belong affirmation and negation. We declare, that conceptions exist, or that they do not exist; and the one of these excludes the other.

A thing cannot be, and not be at the same time; but as there are certain conceptions, which are the opposites of each other, so affirming the one is denying the other. To say that black is white, is therefore, in common parlance, to utter a gross and palpable untruth.

Neither affirmation nor negation, however, is always positive. The mind contemplates some truths as actual, that is to say, it conceives the subjective truth within itself to be certainly agreeing with the objective truth in the nature of things, and therefore pronounces unhesitatingly and distinctly upon existence; but of other subjective truths it sees no objective counterpart, and therefore pronounces them not actual, but probable, or merely possible. On this distinction, in a great measure, depends what is called the *mood* of verbs.

Again, we assert truths either with or without reference to the time in which we speak. When we speak with reference, that is to say, when we speak of particulars, we are necessarily compelled to distinguish the present from the past and future; and hence the origin of *time*. When we assert any thing of ideas, we speak of a truth ever present, and therefore we use the present tense in its purest form. Thus, when we say "John is good," we imply a possibility that he might at some other time be bad; and when we say "John is writing," we imply a certainty that he was not writing at some previous time, and will not be writing at some future time; but when we say two and two are four, we not only

assert a truth of to-day, or of this year, or of this century, but a truth which must be ever present, since we cannot conceive it ever to have beginning or ending. This remark is sufficient to show that those grammarians are in error, who make the signification of time a necessary characteristic of the verb.

In whatever way we assert any thing, the assertion is a declaring of some truth, real or supposed; it is a propounding, or showing forth the existence of the truth, or in the language of logicians, it is enunciating a proposition. This is not done by a particular word, as for instance the word *be;* but by the form of the word; for the word *be*, in some of its forms, as, *to be*, and *being*, is a simple conception; and so are the words *love*, *hate*, *walk*, *sing*, and indeed all others which may be used as verbs. Mr. Tooke, therefore, was very accurate as far as regards words, in saying that the verb was "a noun, and something more;" but when towards the end of his book, he came to consider what that "something more" was, he found himself entirely at a loss, and was forced to break off abruptly; since the just solution of the difficulty, as we conceive, would have overturned the whole system, which he had labored throughout two ponderous volumes, to correct: it would have shown the mind of man to be an active intelligence, not only in forming conceptions, but in uttering, declaring, propounding, and asserting them to be truths.

The discovery would have been still more fatal to Mr. Tooke's grammatical system, had it been more fully developed; for when we come to ask how, and in what various ways, a truth, or to speak in the phrase of logicians, a *judgment*, is asserted, we shall find that this depends entirely on the different kinds of conceptions; and, as we have already seen, these kinds are produced by different acts of the mind; whereas Mr. Tooke treats them all as of one kind only, and all as received by the mind from passive impression.

We assert then, either existence or action: If the former, we either assert it simply of a conception, as "*God exists;*" or we assert it conjointly of two conceptions, which are of a nature to exist together, as the substance with its attribute, or the whole with all its parts, or the universal with the particular. Thus we say "God is good," "two and two are four," "gratitude is a virtue." If we assert an action, we must consider it either as proceeding from its cause, or as received by its passive object, that is to say, we must employ either the active or the passive verb; and which ever we employ primarily, we must, if such be the nature of the action, add the other secondarily. There are indeed, actions which rest in their causes; and the verbs expressing these, whether *active* or *passive*, in construction, are really of the kind called intransitive, such as "to rejoice," "to sleep," "to reflect," etc.

A truth asserted leads to a further truth, by that faculty, which Shakespeare calls "discourse" from the ancient scholastic and accurate term *discursus*. Hence that beautiful and philosophic passage—

> "He that made us with such large discourse,
> Looking before and after, gave us not
> That capability and god-like reason,
> To rust in us unused."

This faculty, for want of a better term, we shall call *deduction*. It arises from the comparison of truths; and as that comparison refers to something common to both the truths compared, the consequence or inference to be drawn is always of the nature of a particular, under some universal expressed or understood. Of the forms of deduction, the most perfect is the syllogism; but the whole force of the syllogism depends on the *universal* conception which it involves. It is, therefore, clear, that the modes by which one truth is deduced from another, imply a power in the mind beyond that merely receiving impressions. The deduction may be made from hypothetical premises. Hence arises a further explanation of the use of moods in the verb. We assert a truth, not as actual, but as possible, and the consequence which we deduce becomes a contingency, necessarily following from the premises, but not necessarily true, because the premises themselves are not necessarily so.

Thus have we enumerated the three faculties which go to the making up of the reasoning power, and which are *conception*, *assertion*, and *deduction*, answering to the *simplex apprehensio*, *judicium*, and *discursus* of the logicians. All continued exercise of reason resolves itself into a repeated exertion of these faculties; and the only difference is, that the truths produced by one deduction serve to enlarge or improve the conceptions which are employed in framing other assertions and deductions.

Hitherto we have had occasion to notice only those operations of the mind, as giving birth to the primary parts of speech, the *noun* and *verb*, the *adjective*, the *pronoun*, and the participle, which are distinguished from the *adverb*, the *conjunction*, and the *preposition*, by being subject to reflection or change of form, either in the beginning, the middle, or the end of the words by which they are expressed. This latter circumstance, however, is merely accidental, and with respect to the essential difference of the *adverb*, *conjunction*, and *preposition*, from the other parts of speech before mentioned, we must repeat what we have before stated, that the mind contemplates truths at first in the mass, and then by reflection breaks down that mass into certain portions which again are subdivisible; so that in asserting one truth, we cast, as it were, a rapid glance over the subordinate branches of which it is composed; as in viewing the whole beauty and propor-

tion of the Apollo Belvidere, we see at once the graceful turn of the head, the animated advance of the arm, the receding of the opposite foot; or as in contemplating the agonised form of the Laocoon, the two sons with the folds of the serpents which twine around them, occupy a secondary place in the imagination. When we come to develop these secondary parts of the composition, we find in them the same principles of unity and connection, as in the general outline of the whole groupe: and so it is with the subordinate parts of a sentence; which are, if we may use the expression, truths within truths, assertions within assertions. Thus even the long and flowing sentences of Milton's prose are each reducible either to an assertion, or at most to a deduction, as their ground-work; but upon that ground-work are built many other assertions, which are assumed, though not formally stated as such. Each adverb, each conjunction, each preposition contains such subordinate assertion, and of course involves a conception; it is therefore true, that these parts of speech ultimately resolve themselves into *nouns and verbs*—ultimately, we say, but in the first glance and motion of the mind, as it were, they only appear in their secondary character, as helps and expletives to the principal words in the sentence.

The *passions* must not be overlooked, in considering the mind in its relation to language. It often happens that an abruptness, a transposition, and that which might be called an irregularity, if we referred only to the operations of reason, become appropriate, and even necessary forms of speech, when the mind is under the influence of passion. The reasoning powers are then disturbed and imperfect; the emotions become inordinate, the will obtains a preternatural force. Hence arises the *interjection*, which some grammarians have refused to reckon among the parts of speech; but their refusal is vain: so long as there are men with human passions and affections, there will be interjections in their speech, words which stand out from the rest, very significant of emotion though not of conception, defying all rules of construction and arrangement, because such rules bear reference principally to the power of reason, which is suspended or superseded, whenever passion produces the animated and expressive interjection. Passion, too, has given birth to what we commonly, though not always very appropriately, call the *imperative mood.* When Esau says, "Bless me, even me also, oh, my Father!" We feel the earnestness of the prayer, widely different as it is from a command. Again, the same example shows us, that the *vocative case* of the noun is of similar origin. "Oh, my father," is a strong expression of passion; but it is totally dissevered in construction from the enunciation of any truth, and has nothing to do with any operation of reason. Many other forms and modes of speech take their character from passion; as may be particularly observed of

the *interrogative*, so often the result of an eager desire to know the very fact, which, it may be, we fear and tremble to assert.

It is to be observed, that all the exercises of all the human faculties may be clear or obscure, distinct or confused. Our very consciousness may be that of mere dotage, our feelings may be blunted, our will wavering and undetermined, our conceptions vague, our assertions doubtful, our deductions uncertain, our passions a chaos. It has been elsewhere said, that the thousand nameless affections, and vague opinions, and slight accidents which pass by us, "like the idle wind," are gradations in the ascent from nothingness to infinity; these dreams and shadows, and bubbles of our nature, are a great part of its essence, and the chief portion of its harmony, and gradually acquire strength and firmness; and pass, by no perceptible steps, into rooted habits and distinctive characteristics. Still the channels in which the stream of mind flows, so long as it has any current, remain always the same: the mental faculties which we exercise, so long as we can exercise any, are subordinated to the same laws, and display themselves in the same manner. Hence speech is, in all nations, necessarily formed on the same principles; and though no one language was ever constructed artificially, yet it is astonishing how distinctly all present the traces of the same mental power, operating, in the same manner, on materials so exceedingly different.

ANCIENT HISTORY.

As the Arts and Sciences, in general, attain to maturity by slow degrees, so the science of History, in particular, continued, for a lengthened period, in a state of infancy. The first historians of every country were mere chroniclers of events, the evidence of which rested on the uncertainty of tradition and hearsay; or which were in some degree, but in general slightly, investigated by inquiries made in the course of foreign and domestic travel. Those simple narratives which are to this day read with so much interest in the pages of Herodotus and Froissart, were the fruits of many a long and painful journey. It was in consequence of the personal, still more than of the epistolary intercourse, which, during the barbarism of the middle ages, the clergy of distant provinces and of remote countries maintained with each other, that the mass of true and false reports was collected, which, from

the recesses of monastic libraries, shed a dim light upon the period which intervenes between the seventh and the fourteenth centuries of the Christian æra. For the monasteries were then the principal, or rather the only refuge of literature. Within their gloomy walls genius occasionally broke the trammels of superstition, and studious industry beguiled the dull uniformity of the endless round of religious exercises. There chronicles were compiled, transcribed, and deposited in a custody which was respected by the semi-barbarous chieftain, and even by the lawless freebooter. In many of these compositions the marvellous, as might be expected, frequently supersedes the probable; miracles and prodigies are more abundant than the incidents of common life, and truth is obscured by fable. The traditionary errors thus recorded, for some time obtained implicit belief, and were handed down, by compiler after compiler, to the credulity of successive generations. But as knowledge was improved and extended, the scope of the historian was enlarged; his judgment became more discriminating, and his taste more fastidious. He rejected the fabulous, the uninteresting, and the trifling matter which he found in the writings of his precursors, or cited it only as a characteristic of the credulity of the age in which it was collected. He fixed his principal attention upon topics of inquiry, the discussion of which blended the entertaining with the useful. By just degrees his character was matured; till, by applying to historical investigations the principles of sound philosophy, he rose from the rank of a mere narrator to that of a guide in morals, and an instructer in politics.

The spirit of philosophical inquiry, is, indeed, absolutely necessary to enable the student to reap the full advantage which may be derived from historical researches. If destitute of the power of discrimination, he is liable to waste his time and to be led into error, by listening to the inconsistencies and the improbabilities of fiction; if devoid of the faculty of deducing useful consequences, the utmost extent of accomplishment to which he may be expected to attain, will be the making of his memory a depository of barren incidents. To distinguish probability from improbability, to separate truth from falsehood in the undigested mass of the obscure records of ancient times, or amidst the misrepresentations of party zeal and factious malignity in more modern periods, requires the exercise of consummate sagacity. Voltaire has justly observed, that, in order to be qualified to seize the proper objects of history, a man must not be acquainted with books alone. He must have a minute knowledge of the human heart, and must be endowed with sufficient skill to enable him to analyze the prejudices and the passions of men. A reader of this description will give due weight to circumstances and situations. He will not, for instance, estimate the character of a despot by the panegyric of a courtier;

and if a prince has resisted the claims of ecclesiastical encroachment, and restrained the power of the clergy, he will not pass sentence of condemnation on him, merely because his reputation happens to be vilified in the writings of a monk.

In order to complete the character of an Historian, to this soundness of the intellect should be added a strict integrity of principle and a feeling heart. His standard of moral and political excellence must be fixed at an elevated point. He must be endued with a sense of dignity, which will lead him to disdain to become the convenient apologist of folly or of vice. He must entertain a strong dislike to every species of injustice; and he ought to be armed with a boldness of spirit, which will prompt him, without regard to personal consequences, to represent the actions of men in their true lineaments. At the same time it is his duty to cherish a spirit of candor, and to chastise and subdue all those party feelings, and sectarian prejudices, which, presenting facts through a deceitful medium, distort their forms, and display them in colors not their own. He must beware of indulging the partiality of favoritism—of lavishing upon some honored hero, praises to which he is not justly entitled, and of ascribing to him glories to which he has no claim.* He must also divest himself of that attachment to system, the consequence of a propensity to generatize ideas, which is too often mistaken for genuine philosophy. He must carefully guard himself against this error, which causes so many investigators of past transactions, to overlook circumstances which controvert their respective theories, and induce them to undervalue and suppress such facts, as appear to be in any point of apprehended importance inconsistent with their preconceived conceptions.

The foregoing enumeration of the qualities of an Historian, may serve as a guide to those who enter upon historical inquiries, without a view of submitting the result of their investigations to the scrutiny of the public eye. In every department of knowledge, and in every circumstance of life, truth should be the object of the inquirer—and truth is to be found only by diligent research, and by an unprejudiced exercise of the reasoning powers which have been communicated to man, by his all-wise Creator. The author and the reader of History, ought to be directed by similar rules, in the same manner as an enlightened spectator judges of the merit of a specimen of art, by the principles which guide the hand of the skilful artist.

In a regular course of historical studies, our attention is in the first place directed to Ancient History. Though the importance of this branch of inquiry was, perhaps, in the age of pedantry too

* "Quis nescit primam esse historiæ legem, ne quid falsi dicere audeat, ne quid veri non audeat, ne qua suspicio gratiæ sit in scribendo, ne qua simultatis."
Cicero de Oratore, Lib. II. C. 15.

much magnified, it has of late, by some authors of no mean repute, been too much decried. The destiny of mighty states and empires is surely in itself a legitimate subject of attentive examination. At whatever period of the world these states and empires may have existed, the tracing of the causes of their rise and of their decline, cannot fail to impart lessons of wholesome instruction; and as the natural constitution of man is the same in all ages, a due consideration of the events and characters of elder times, will tend to correct false estimates of things, and to establish moral and political principles upon the solid basis of experience. The minute inquirer into the events of Ancient History will find, that they have a much more direct analogy to the transactions of modern times, than is generally imagined.

As it is supposed that the student of History enters upon this inquiry at an early period of life, it follows as a necessary consequence, that he ought to be directed to the perusal of such authors as are easy of comprehension, and at once clear and succinct in their style, and in the disposition and arrangement of their matter. In pursuing his historical studies, he will find it expedient to trace back the course which has been delineated, of the progress of historical composition. In this course *general histories* and *compendiums*, are the last in order. But these are the first books, to which the historical student will be referred; and in proportion as his knowledge increases and his judgment ripens, he will be encouraged to apply himself to the examination of the older chronicles and original documents, and to the discussion of disputed points in History. It has been well observed by Dr. Priestly, in his Lectures on History, that this method of beginning by compendiums, "is like sketching an entire outline, before any part of a picture is finished; and learning the grand divisions of the earth, before the geography of particular countries." The advantages of this method are indeed sufficiently obvious. It at once directs the attention of the youthful mind to those grand and striking events in the annals of states and empires, which have produced the most important effects in their respective destinies. It distinctly shows the bearing upon each other, of transactions which took place in successive epochs; and points out the reciprocal influence of the conduct of different countries upon their mutual welfare. For a judicious compendium follows the "*summa fastigia rerum.*" It dwells upon circumstances of primary importance, the conspicuous results of a multiplicity of minute operations. It avoids debatable points, or states in a short compass the decision which is the result of laborious investigation; and thus bringing to view nothing but what is in a manner palpable and plain, it is well calculated to arrest the attention, and to impress the memory of the youthful student.

A variety of general epitomes, embracing of course an abridgment of Ancient History, has been written in the Latin tongue. Of these the most celebrated are Tursellin's and Le Clerc's. The former was long made use of, as a text book in foreign universities. The custom, now almost universally adopted, of giving lectures in the vernacular tongue of the respective countries of Europe, has diminished the popularity of these Latin compends. Nevertheless, the two works above mentioned, together with Sleidan's "*Introductio ad Historiam*," or a brief account of the Babylonian, the Persian, the Macedonian, and the Roman Monarchies, are by no means undeserving of perusal.

Bossuet's Discours sur l'Histoire Universelle, which, as it was brought down only to the time of Charlemagne, may be considered, in the main, as an epitome of Ancient History, at its first appearance attained a reputation, hardly warranted by its merits. It is indeed a very elegant, and even an eloquent performance. But the mind of its author was, unfortunately, not a little tainted with bigotry. Hence he too frequently restrains the excursions of inquiry, and is at the same time uncharitable and credulous. To which may be added, that in presenting a chronological series of events, without their details, he frequently becomes dry and uninteresting.

The most complete, and at the same time, the most interesting compendium of Ancient History is that of Rollin. This work is compiled with scrupulous fidelity, from the best Greek and Latin historical writers. In style it is fluent and elegant; and it evinces in its narrative and in its reflections, the pious and upright views of its author. In consequence of the judicious interposition of detailed anecdotes of the principal characters of antiquity, it produces a kind of dramatic effect, which is well calculated to awaken curiosity, and to implant good principles in the juvenile mind. M. Rollin has not perhaps been sufficiently attentive to discriminate between the marvellous and the probable, in his recital of events. He has also occasionally adopted an erroneous system of chronology.* But as a genuine and entertaining

*In an able critique of the present work, in an English periodical, it is observed, that "Rollin was misled by the old scripture critics to record wrongly the principal facts in the Hebrew annals, especially those relating to the captivity. It had not been discovered in his time, that the allusions in Isaiah belong to the siege of Babylon by Darius, and not to the siege of Babylon by Cyrus: nor had it been discovered that Josephus relates twice over the conquest of Palestine by the viceroy of Cyrus; once after the Greek historians who call him Cambyses, and once after the Oriental historians who call him Nebuchadnezzar. There is in consequence an interpolation of full seventy years apparent, but unreal events, which has disturbed the order of time, twisted the parallelism of Babylonish and Egyptian Chronicles, and occasioned the absurd hypothetical conversion of Cyaxares into Darius the Mede. Rollin treats the romance of Xenophon, entitled Cyropœdia, as true history; and with still greater want of judgment, he treats as fabulous the sound and trust-worthy information of Herodotus."

abstract of the representations, made by the original historians of antiquity, his work has not hitherto been excelled.

The ancient History of the Abbe Millot, which constitutes the first part of his *Histoire Generale*, is more brief than that of Rollin. It is also composed with a more acute spirit of criticism. Its arrangement is judicious, and its diction is compact and terse. In pursuance of the principles laid down in his preface, the learned author seizes those topics of historical development, which present the greatest portion of utility. He gives a bold, but faithful sketch of events and characters, and enriches his pages with such an admixture of philosophical observations, as may, without disgusting the reader who is eager in the pursuit of incident, conduce to the formation of an early habit of reflection.

The historical works, both of Rollin and of Millot, may be read by the youthful student with improvement and pleasure. If leisure is wanting, for so extended a course of the elements of Ancient History, the latter is, upon the whole, to be preferred to the former.

With regard to Greek History, we have in the English language, two works of considerable merit—the Histories of Gillies and of Mitford. These works stand paralleled nearly in the same manner as those of Rollin and Millot. The former is the more popular, the latter the more learned. The former is fluent in style, the latter abrupt. By the perusal of the one, the reader is more amused than instructed—by the study of the other, he is more instructed than amused.

Our language is also enriched by two works, which comprehend the general history of the Roman state, from the period of its foundation to that of its extinction. Hooke's Roman history, from its earliest period to the settlement of the empire under Octavius, is comprised in four volumes, quarto. Hooke was a gentleman of considerable erudition, and was intimately acquainted with the original historians, from whom he derived the materials of his own narrative. In the detail of facts, he is copious, accurate, and precise; and in stating the balance of evidence, he generally displays considerable critical acumen. His prejudices against Dr. Middleton, who had offended his feelings as a Roman Catholic, by his celebrated Letter from Rome, have perhaps induced him to give a certain coloring to facts, relative to the conduct of Cicero,* but on the whole, he is candid and impartial. If his style is not remarkable for its brilliancy, it is even in its tenor, clear and perspicuous. In consequence of its prolixity, his work

* On this account the student will do well to check, as it were, this portion of Mr. Hook's narrative by the perusal of Middleton's Life of Cicero, a work of great labor, and, though the accuracy of some of Dr. M.'s occasional translations from Cicero's writings, has been questioned by the critical delicacy of the late Mr. Fox—yet it is a work of high authority.

is not known in proportion to its merits. But it may be safely recommended, as containing a rich repository of facts, collected with industry, and arranged with judgment.

A most important series of events, supplying the principal links of the chain which connects ancient and modern history, is presented to the view of the student in Gibbon's history of the Decline and Fall of the Roman Empire. The merits of this celebrated work, it is difficult to appreciate. It requires no common degree of scholarship, to be duly aware of the immense mass of materials, which, in the course of its composition, its author was obliged to study and to arrange. The minuteness of his references is a circumstance deserving high commendation. His patience and the sagacity of his judgment in the investigation of facts, insure him immortal honor. His language is elevated and dignified; but his desire to vary his phrases, and to say common things in an uncommon way, frequently betrays him into affectation.* The unremitting pomp of his periods becomes fatiguing to the ear; and in the midst of luxuriancy of diction his reader often sighs for the simplicity of Addison. These remarks on the style of Gibbon are, it is presumed, properly introduced into a sketch of a course of study designed for the guidance of youth. "*Decipit exemplar vitiis imitabile*"—and the gorgeous apparatus of ambitious ornament, is too apt to dazzle and mislead the juvenile scholar. At a very early period of his life, Gibbon gave indications of an active and inquisitive mind. He had scarcely assumed the *toga virilis*, when he began to study polemic divinity; and was soon bewildered in the mazes of the controversy between the Roman Catholic and the Protestant churches. In consequence of his abjuring the Protestant faith, he was sent by his father to Switzerland, where he pursued his studies under the direction of a clergyman of Lausanne. Extremes often meet; and by a transition by no means unprecedented, he soon bounded over the limits that separate Popery and Infidelity. Nor were his new principles inactive. In his history of the "Decline and Fall," whilst he professes the utmost plenitude of belief, he aims an artful thrust at the system of Christianity, by attempting to account for its progress merely from the influence of natural causes, independently of its truth and divine original; and by covertly endeavoring to discredit the evidence of the miraculous powers delegated to the apostles. By the disingenuous manner in which he has insinuated his animadversions upon the Christian religion, he has deservedly incurred a serious impeachment of his

* The following passage in the Prœmium to the 8th book of Quintilian, is strikingly descriptive of the fault of Gibbon's style:—"Nam et quod recte dici potest, circumimus amore verborum: et quod satis dictum est repetimus: et quod uno verbo patet pluribus oneramus, et pleraque significare melius putamus quam dicere."

character.* Had he openly attacked the evidence of the Christian faith, the great body of his readers would have been aware of the necessity of weighing his arguments, and deciding on their intrinsic worth. But in his celebrated xvth and xvith chapters of the Decline and Fall, he has so skilfully intermixed correct statements of facts with conclusions, or rather hints of conclusions, which are generally esteemed unwarrantable and mischievous, that it will be proper for every person who peruses his work, to read some of the answers that have been written to that portion of it, which is most strongly tinctured with Infidelity. Of these answers the ablest is that of Bishop Watson. Some very judicious remarks on this subject will also be found in the first part of the general conclusion of Priestly's "History of the Corruptions of Christianity."

After allowing for every deduction, however, Mr. Gibbon's History must be acknowledged to be one of the most correct and elaborate works, which grace the annals of English literature. It commences with a view of the policy which swayed the Roman cabinet in the time of Augustus. Rapidly passing on to the age of the Antonines, A. D. 180, it then begins to assume the form of a history in detail, which is brought down to the period of the total extinction of the Roman Empire in the West; and is afterwards continued to the taking of Constantinople by the Turks, A. D. 1453, and concludes at the establishment of the Papal power in the city of Rome and the adjacent territory.†

Whilst the generality of readers are obliged to content themselves with Epitomes of Ancient History, or with works which have been compiled from the most authentic writers of antiquity, the student who is so fortunately circumstanced as to enjoy a greater portion of leisure, will not limit himself to these means of information; but will apply himself to the original depositories of facts. In order to do this with the greatest prospect of advantage, he will find it expedient to pursue in his reading the regular order of time; for which purpose he may take as his guide, the following sketch of a course of Ancient History as abridged from Wheare's Lectures on History.

In this sketch of a course of History, it is taken for granted that, according to ancient and laudable custom, the pupil is at an early age initiated in a knowledge of the historical books of the

* The integrity of Mr. Gibbon's principles on the subject of religion, may be duly appreciated by the perusal of the following extract from his private Memoirs: "Had I believed that the majority of English readers were so fondly attached even to the name and shadow of Christianity; had I foreseen that the pious, the timid, and the prudent, would feel or affect to feel, with such exquisite sensibility, I might perhaps have softened the two invidious chapters, *which would create many enemies, and conciliate few friends.*"

† Niebur's Rome, and Sismondi's Fall of the Roman Empire, are very excellent works, and may be consulted with profit.

Old Testament. Independently of their value in a religious point of view, the Jewish Scriptures deservedly claim the attention of the inquirer into the early state of the world. It has been well observed by a very competent judge, that "the truth of the history contained in the Hebrew Scriptures has never been invalidated by any monument of antiquity, that can stand the test of sober investigation."

He will then proceed to Herodotus, the earliest historian extant next to the authors of the historical books of the Old Testament, and whose works include the history of the Lydians, Ionians, Lycians, Egyptians, Persians, Greeks and Macedonians, from the year 713, to the year 479 before the birth of Christ. By way of illustration of various circumstances related by Herodotus, it will be advisable for him to peruse the first, second, third and seventh books of Justin, and the seventh book of Xenophon's Cyropœdia.

In reading Herodotus, it is sometimes difficult to distinguish truth from fable. But fable is rejected from the valuable work of the philosophic Thucydides, whose introductory summary of the History of Greece, takes up the thread of narration where it was dropped by Herodotus; and who continues the Grecian annals to the twenty-first year of the Poloponnesian war. Additional light will be thrown upon this period, by the perusal of the eleventh and twelfth books of Diodorus Siculus—the fourth and fifth books of Justin, and the first book of Orosius.

The first and second books of Xenophon's History of Greece, complete the account of the Peloponnesian war, which was left imperfect by Thucydides. After these the student will read with no less pleasure than profit, Xenophon's interesting story of the Expedition of Cyrus, and the retreat of the ten thousand. He will then resume the same elegant author's History of Greece, which brings down the annals of the Greeks and Persians to the battle of Mantinea, B. C. 363. The fourth and fifth books of Justin treat of the same events; as also the fourteenth and part of the fifteenth books of Diodorus Siculus, the continuation of whose work contains the history of Greece and Persia down to the commencement of the reign of Alexander the Great.

The history of Alexander has been written by Arrian, Quintus Curtius and Plutarch. After these authors may be read the eighteenth, nineteenth and twentieth books of Diodorus Siculus, which, together with the thirteenth, fourteenth and fifteenth books of Justin, contain the History of Greece from the year 323 before Christ to the year 301.

At this period, the course of historical narration may be traced from the sixteenth to the thirtieth books of Justin, and all that follow, till the two last, which complete the history of Greece till it mingles with that of Rome.

The early annals of Rome are illustrated by Dionysius of Halicarnassus, the fragment of whose history which has been saved from the wreck of time, extends to the dissolution of the Decemvirate in the year 341 before Christ.

To this period also extend the three first books of Livy, whose tenth book brings the history of Rome to the year 292 before the Christian æra.

The work of Livy has unfortunately come to the hands of the moderns in a very mutilated and imperfect state. A chasm occurs between the tenth and twentieth books, which may, however, be, in some measure, filled up by the perusal of the first and second books of Polybius—the seventeenth, eighteenth, twenty-second, and twenty-third books of Justin, and fourteen chapters of the fourth book of Orosius—the second tome of the annals of Zonaras, and Appian's Punic and Illyrian Wars. After Appian, may be read the remainder of Livy, from the twenty-first book to the end, which brings the Roman history to the year before Christ 166, and the Epitomę of Florus, which carries it down nearly to the termination of the reign of Augustus.

The war of Jugurtha, and the conspiracy of Catiline, which happened respectively, 100, and 62, years before Christ, have been narrated with energetic conciseness by Sallust.

Many of the varied transactions in which Julius Cæsar was engaged, are best illustrated by his celebrated commentaries, and the supplement to that work, compiled by Hirtius and others. The secret history of this important period will be most clearly understood, from the perusal of Cicero's Epistles; and great light will be thrown upon the whole of this extensive course of ancient history, by occasional references to the lives of illustrious Greeks and Romans, as recorded by Plutarch and Cornelius Nepos. The fragments of the history of Dio Cassius, which have survived the wreck of time, contain a detail, but not a very interesting one, of the events that took place between the period when Lucullus flourished, and the death of the Emperor Claudius. In combination with Dio Cassius, may be read with advantage, the elegant Compendium of Velleius Paterculus.

The lives of the twelve Cæsars, written by Suetonius, will prepare the way for the study of the works of Tacitus, who may justly be denominated the chief of philosophical historians. On the times of servility which succeeded the period in which he lived, a dim light is shed by the works of Aurelius Victor, Herodian, the six compilers, who are commonly known by the name of the Scriptores Romani, Eutropius, Zosimus, Zonaras, Jornandes, Ammianus Marcellinus, Procopius, Agathias, Nicetas Acomiatus, Nicephorus Gregorius, and Joannes Cantacuzenus, which may be read in the order in which they are here detailed.

Procopius, Zonaras, etc. are distinguished by the appellation of the Byzantine historians; and their works relate the history of the Greek, or Eastern Empire, to the period of its destruction by the Turks. A collection of these writers was, at various intervals of time, published in thirty-six magnificent volumes in folio, from the Louvre press. They were likewise reprinted at Venice, in the year 1729. W. S.

ON THE EXISTING SYSTEMS OF EDUCATION IN THE HIGHER PLACES OF LEARNING, AND ON THE MEANS OF IMPROVING THEM.

NO. I.

As the object of education in all seminaries is, to prepare young people for discharging the several duties and offices of life, it is surprising that there should be so little uniformity in the means employed for the attainment of that important end.

In most of the European Colleges, a considerable part of the course of instruction, is devoted to the study of Greek and Latin; but in America, the attention is not so exclusively confined to the learned languages. We do not attach to classical learning that high importance which makes it the exclusive object of study; thinking it of greater consequence to the students, to receive instructions in the elements of science, both mental and physical, than to acquire even the most accurate knowledge of the ancient tongues; of which all that is valuable may, it is thought, be obtained without so great a sacrifice of time and labor.

We need not, however, be surprised at the exaggerated notions which have been formed, in regard to the value and importance of the ancient languages. They are justly considered as channels by which science and literature were conveyed to the nations of modern Europe: while the genius and talents displayed in the more celebrated compositions of antiquity,—in the songs of the poet and the declamations of the orator,—continue to exercise that charm on the minds of the learned, which at first arose, perhaps, from novelty or gratitude. There is, besides, a hereditary veneration among scholars for the works which delighted

the illustrious persons whom they have been taught to admire; and which laid the foundation of that immortal fame which has kindled their own ambition, and is valued by them as the highest recompense of human talent and industry.

But the practice of devoting so much time to the languages of Greece and Rome has been defended on other grounds. It is maintained that the knowledge of these tongues affords a remarkable facility for acquiring others; that they present an excellent model for the study of general grammar, and even the most recondite principles of thought and speech; and, moreover, that a good classical education qualifies a young man to use, with elegance and propriety, the vernacular language of his country.

It is impossible to deny that these, and perhaps other advantages, result from the study of ancient literature. It is only to be considered, whether all these might not be procured at less expense of time and labor, and without sacrificing other important objects, which ought likewise to make a part of the course of instruction. The principles of general grammar, and even the particular structure of any individual language, might surely be sufficiently acquired without that very minute attention to prosodical niceties which occupy so much time in many distinguished seminaries of the highest order, both in Europe and the United States. We do not object to such inquiries being pursued by those, whose taste and inclination dispose them to indulge in a microscopic examination of that fine mechanism which distinguishes poetical language, and of which the beauties can only be duly appreciated by such as have been accustomed, from long study, to render the various measures and cadences familiar to their ear. We merely question the expediency of imposing upon all young men, whatever may be their talents, their likings, or their destination, the necessity of devoting so large a portion of the most valuable period of life, to a species of occupation which neither supplies a suitable exercise to the mind, nor rewards exertion by the attainment of useful knowledge.

Our object in these remarks will, however, be very much mistaken, if it be supposed that we have any intention to undervalue the advantages of classical education. But we humbly conceive, that if classical knowledge be not ample, it is, in a great measure, useless; and that no time is less profitably spent, than that which is passed in acquiring a mere smattering of the ancient languages. It does not, however, follow, that the literature of antiquity should engross the exclusive attention of young men at college, or schools of elevated character, from day to day, and from term to term, and thereby preclude the study of those more important branches of knowledge which lay the foundation of professional eminence, in the several departments of active life. The labors

of the school-boy should not be allowed to employ the more mature talent of the man; nor should the mere study of Latin and Greek words be permitted to supersede the investigation of modern science, and those sublime researches into the properties of matter and of mind, which have remunerated the labors of philosophy during the last two hundred years.

The course of study in the higher places of learning ought to comprehend, besides the learned languages, the elements of philosophy in all its branches,—of the science of mind, logic, ethics, geometry, and physics. We speak here only of the elements of those sciences, as alone applicable to the age and acquirements of the student, at this period of his academical life. For it is not to be imagined that any professor will undertake to communicate, in the short time allotted to such pursuits at college, or in high schools, a complete system of principles and deductions, in any one of the departments now specified. A teacher must not expect to carry his pupils, in the course of a few months, to the higher parts of those sciences, which it may, notwithstanding, be proper to put them in the way of studying for themselves. All that he can accomplish, in so short a period, is to open up the path which they are afterwards to pursue, to give directions for their successful progress, and to define the objects which they are to keep in view. By inducing them to employ their intellectual faculties, according to the plan of diligence proposed, he will enable them to know their own strength; and, at the same time, to acquire the command of a powerful instrument which nature has put into their hands, for the most valuable purposes. For when the habit of investigation is once formed, and the energies of the mind are placed under the control of well-regulated attention, the student becomes his own best teacher, and the important work of education goes on of its own accord, without either pain or effort.

In these outlines, we have arranged the subjects of the introductory part of mental philosophy in the following order:—

First. The elements of the science of mind, or, an analysis of the powers of the mind, particularly of those by which knowledge is acquired, followed by an illustration of their several modes of operation, derived from the origin of language, and the principles of general grammar.

Second. The elements of intellectual culture, applied to each respective faculty, and to their mutual co-operation or processes of action: illustrated by the history of logic, ancient and modern.

Third. An analysis of the powers of taste; or, as they are sometimes called, of the internal or reflex senses, of novelty, beauty, sublimity, etc.

Fourth. An explanation of the means by which these powers or susceptibilities are cultivated; illustrated by the history of the

fine arts, and the principles of composition in the department of belles-lettres.

Fifth. The powers of communication by speech and writing; and the means of cultivating these powers, illustrated by the history of the arts of rhetoric and criticism.

The subjects may be supposed to occupy a prominent part of a collegiate or academical course, and very properly made to precede the more profound inquiries which belong to ethics and physics. There has, no doubt, been considerable difference of opinion among the learned, as to the nature of the studies which ought immediately to succeed the classics, in the order of academical tuition. Some recommend geometry and natural philosophy, as more suitable to the physical connections of things, where facts lay hold of the mind, before reason can deduce principles or generalize phenomena. In certain colleges or universities, accordingly, the students pass from the ancient languages to some one of the sciences which respect matter, and enter not upon the philosophy of mind, logic, ethics, etc., till toward the close of the course of studies.

Reasons, however, might be assigned, that it is more advantageous to begin the philosophical course with the studies which respect the operations of the mind. In all the branches of human knowledge, mind is either the *subject* or the *instrument* of research. In metaphysics, ethics, politics, theology, and taste, no progress can be made without a previous analysis of the intellectual and moral faculties; the anatomy of the mind must be studied, before the mental powers can be thoroughly known or successfully exercised; and no one will so profitably employ himself in the examination of the material world, as he who has been accustomed to turn his mind inward upon the course of its own operations, to mark their origin, their connection and their results.

It is of less consequence, no doubt, to vary a little, the order in which the subjects of study are introduced, than to leave out the most of them altogether: and it does, we humbly confess, appear to us, that in some of our colleges or universities, there is too great a portion of the course exclusively devoted to the pursuit of classical literature.

But it is not only the matter of study which engages the attention of those who take a survey of the present state of college or university education; the methods also which are adopted in the several seminaries of our own country, and which present not less variety than the subjects to which they are directed, claim their serious consideration, and naturally suggest some thoughts on the means of their improvement.

It is well known that the method of teaching philosophy which is pursued in the best European colleges or universities, differs

considerably from that which has been acted upon in this country. In the former, a series of written lectures, composed or compiled by the professors, are annually delivered from their respective chairs; whereas in the latter, the business of education is mostly carried on by means of reading, and a species of colloquial examinations. In the prosecution of this last method, the professors, instead of lecturing, peruse certain authors along with their pupils, explaining particular passages as they go along, and conversing with them on the doctrines or facts to which their attention has been directed.

Each plan, no doubt, has its peculiar advantages; but it appears to be easily practicable to combine the best parts of each, without sacrificing any thing essential in either. Could this not be effected, we have no hesitation in preferring the tutorial system, limited and restricted as it must be, as infinitely more useful than a mere course of lectures, unaccompanied with examinations and exercises. The leading improvement, then, which we should venture to recommend, is the introduction into our colleges or higher seminaries, to a certain extent, of the method of teaching by means of reading, conversation and lectures. This addition to our system, so far from obstructing or superseding any of our accustomed processes of intellectual culture, would, we are convinced, both render them more efficacious, and, at the same time, more agreeable to the students.

But, we are aware, it may still be proposed as a preliminary question, whether the method of teaching, in present use, in our institutions, does not answer all the purposes of education, as well as that which is here recommended: whether a careful perusal of select authors, and a subsequent conversation upon them, between the tutor and his pupils, are not employments as likely to improve the minds of youth, as a formal lecture pronounced in their hearing, even when it is made the ground-work of examination, and converted into the materials for exercises in composition.

To decide this point, it is necessary to come to an understanding as to what are, or ought to be, the main purposes of education; and we should imagine, there can be no difficulty in admitting that these are comprehended, *first*, in the communication of knowledge; and, *secondly*, in the cultivation of the mental powers, without a reference to any specific acquirement, in literature or science.

With regard to the communication of knowledge, there can be no doubt, as far as regards classical learning, mathematics, and the higher parts of arithmetic, that the only rational method of conveying instruction is to peruse, with the pupil, the best works in these several departments. No man ever thought of teaching a boy to understand Homer, Euclid, or La Place, by means of lectures. But, we are now speaking of philosophical education, as

it relates to the science of mind, or morals, and of human life; the principles of reasoning and of taste; the distinction of good and evil, the doctrines of justice, of law and of government; and, certainly, in this wide field, where opinions have so long remained unsettled, and where no authority is permitted to give a final decision, a very different mode of instruction ought to be pursued. It is here, in short, that the lecture system ought to be introduced, as supplementary to that of individual reading.

For instance, it is only necessary to observe that no one writer contains all that the student ought to know, and that every writer comprehends more than it is either requisite or expedient should be laid before him. Our greatest authors, it is well known, wrote, not for beginners, nor with the view of giving a didactic system, but for the learned world at large, and commonly, too, with the intention either of attacking or supporting some particular hypothesis. It is impossible, therefore, to find, in any single work, the elementary statements, combined with those general views, on which a philosophical education should be constructed: and thus it necessarily becomes the office of a teacher to read, to select, and to arrange, for the use of his pupils; and from the stores of knowledge with which his professional studies must be supposed to have furnished him, to bring forward what shall appear best suited to their previous attainments, as well as to the particular object of his course. In drawing up his lectures, in such circumstances, the professor will frequently see it expedient to confine himself to the outlines of subjects, which may be treated by the original author in great detail: he will give, at some length, the history of opinion, on the more important questions which present themselves for discussion: he will call the attention of his pupils to the various stages in the progress of the human mind, from its first attempt at generalization to the accomplishment of a connected system: and, in particular, he will point out the numerous sources of error, whether arising from the nature of certain inquiries, or from the imperfection of human reason, which have at various times materially retarded the advancement of science. Indeed, in many subjects of study, such as divinity, law, ethics, and politics, the history of opinion constitutes the sum and substance of our knowledge. Our inquiries, after the statement of a few first principles, are directed to little more than the succession of truth and error, to the varying forms which they may have assumed, and to the circumstances which have paved the way for their alternate reception. It must then be abundantly evident, that the perusal of no one work, in these departments, nor, indeed, of all the works, at any one period, would be sufficient for the purposes of instruction.

If, indeed, we shall be allowed to suppose, that the object of the teacher and his pupil is confined to the very limited attainment of knowing what were the opinions of an individual author; of Aristotle, for example, of Bacon, of Locke, or of Reid, on any particular point of philosophy, the plan of education at present pursued is unquestionably the best that could be imagined to gratify their ambition; for, they have only to turn up the chapter and section of the particular work, to examine the argument, and note down the conclusion. But if, on the other hand, their views extend to the more exalted object of inquiring what are now received as the general opinions, on the various subjects handled so successfully by Aristotle, Bacon, Locke, and Reid, in their respective works—what were the notions which prevailed as to the object of philosophy, and the principles of human knowledge, in the long interval between the first and last of these distinguished writers—what were the discoveries or modes of thinking which led to the several changes of doctrine on these points, as we find them recorded in the history of science, and upon what particular grounds each succeeding theory was ultimately maintained or rejected, it is manifest that all the reading which the pupil, directed by his teacher, could possibly overtake, during the whole time allotted for academical instruction, would not enable him to accomplish this end. In short, the reading system of instruction can only be recommended, when the teacher wishes to convey to his students the views of some individual philosopher; and, as such a limited undertaking is altogether inconsistent with the present state of science, it follows, that, in order to realize the first mentioned purpose of academical education, namely, the communication of knowledge, the teacher ought to prepare, from his own store of information, a course of lectures for the use of his pupils; containing at once an outline which they should endeavor to fill up, and as a guide to the best source of materials.

Let us apply these general observations to the actual practice of the schools where the reading plan of teaching philosophy is adopted. The books usually read, as introductory to the philosophy of mind, are, we believe, Locke on the Human Understanding, Reid's Essays, Stewart's Elements, Dr. Brown's works, and one or two others on the same subjects. Now, it cannot fail to strike every person acquainted with the character of the publications just specified, that, in many respects, they are quite unsuitable for the purpose of elementary instruction; particularly as they contain, even in the first parts of them, much of abstraction, generalization, and deep reasoning, entirely beyond the comprehension of the youthful mind. We pass over Aristotle's Analytics, which are now generally considered as altogether unfit to be used as an introduction to the study of philosophy. But even the

Essay of Mr. Locke is little better calculated for the commencement of a philosophical course. He begins with a very argumentative dissertation on the doctrine of innate ideas, and goes on to explain our notions of power, time, space, infinity, etc., which are some of the most abstract conceptions of the human mind. Dr. Reid, again, in his Essays on the Intellectual Powers, after some very judicious observations on the method of studying mind, proceeds almost immediately to certain hypotheses on the nerves and brain, the phenomena of external objects, and the doctrine of ideas illustrated by the theories of Berkley, Leibnitz, and Hume. The work of Mr. Stewart, too, although entitled Elements of Philosophy, can be considered as elements to those only who have already made considerable progress in the study of mind. It requires only to run over the contents of the first part of his first volume, to be satisfied of this fact. The general and enlightened views which he gives on education, on the art of reasoning, and on the theories of perception, cannot be fully comprehended by those to whom the very term philosophy has never been explained, and who are of course completely in the dark as to the precise objects of all their inquiries.

It cannot be necessary to remark, we should hope, that these strictures have no reference whatever to the general merits of the works now mentioned, all of which have so materially extended the bounds of science, and done so much honor to their respective authors. Nothing more is meant, than that from the subjects which are discussed, and the abstract manner in which these works are composed, they are not at all suitable, as school-books, to the habits and acquirements of those entering on a course of philosophy.

But, supposing that the works of an individual philosopher, Mr. Locke or Dr. Reid, for instance, were completely calculated for an academical course; that the matter, the arrangement, and the mode of writing, were, in all respects, suitable to the capacity of beginners, it is clear that pupils taught in this way would only become acquainted with the opinions of one man, and with the state of philosophy at the particular period when he wrote. With respect, then, to the acquisition of knowledge as connected with the history of opinion on the subject of mind, of reasoning, of morals, the method of teaching, would, in our humble opinion, be greatly improved by introducing the practice of lecturing, combined with individual study or book-reading, in places of instruction.

W.

[*The conclusion of this article in our next.*]

THE EDUCATIONAL INSTITUTIONS OF GERMANY.*

The schools of Frankfort consist of lower and higher popular schools, a Gymnasium in which the higher branches of science and classical literature form the objects of instruction, and a variety of noble institutions for communicating knowledge in distinct branches of art and science.

The first of these classes of schools will be more easily treated, by arranging them according to the several religious persuasions to which they belong, namely, Protestant, Catholic, and Jewish.

The *Protestant Volkschulen* consists of three lower, or elementary schools, for the city itself, eight similar institutions for the eight villages depending upon Frankfort, and two middle schools, between the popular schools and the gymnasium, of which one receives simply the name of middle school, the other that of *muster* or model school. The Protestant Volkschulen in Frankfort receives children of both sexes in the same schools, and the three lower popular schools in the town itself, by the last report, numbered 2,000 scholars. The funds of the schools for primary instruction, are furnished in the Protestant schools, by the school-money paid by the parents; and for each scholar, the sum demanded is ten florins annually. For the aid of the poor scholars, many funds exist, principally derived from legacies and similar sources. The salary of the masters in the primary schools amounts to 600 florins each. A master becoming, by any legitimate cause, incapable of exercising his functions in the service of the State, was formerly entitled to the whole of his salary as retired allowance;

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* This abstract is made from a late English work by G. P. R. James. In the abstract, we are led to believe, will be found many hints which will be highly useful in the organization of the public and private schools of our country. The people of the United States who have every thing at stake, as regards their political institutions, in the education their youth receive, ought to give an extended, deliberate and accurate examination to the scholastic institutions of a country which exhibits the most brilliant, the most extraordinary system of education that the history of literature can display. In less than a century what has Germany shown to the world? The most immense advance as a literary people that ever yet was known. The whole literature of Germany, a literature at once solid and brilliant, lies in that one period; and it is scarcely too much to say, that three centuries out of the history of any other country will scarcely present such a constellation of great names as the last century offers us in the German annals. Her Goethe, her Schiller, her Klopstock, her Schlegel, her Neibuhr, are familiar to English scholars, and the institutions and the systems of instruction which have produced such men, are surely deserving the deep attention of all who see in sound and broad education the firmest support of our civil and religious institutions.

but a new regulation has lately been introduced, and all masters obliged to retire at the end of ten years, receive one-third of the salary; those who have served twenty years can claim two-thirds; and those who have completed thirty years, are entitled to their full salary for the rest of life. This applies to all masters in the service of the State.

The *Protestant Middle School** is at present attended by 400 scholars, each of whom pays as school-money, twenty florins per annum. This revenue, thus produced, according to the excellent and almost universal regulations throughout Germany, is collected by a commission, appointed by the town, and called "Economic Deputation," of which neither the head master, called director, nor any of the inferior masters are members. It is charged, also, with financial arrangements relative to the school; and it is not unworthy of remark, that at present the revenues of the middle school exceed considerably its expenses, and that the surplus is applied to the furtherance of other branches of public instruction. In case of a deficiency, however, the State supplies the necessary funds.

The Objects of Instruction in the *Protestant Volkschulen*, are—

In the three Primary Schools—The christian religion, reading, writing, the German language, arithmetic, singing, female works, and gymnastics.

In the Middle School—The objects of instruction are, religion, reading, writing, history, natural philosophy, arithmetic, geometry, drawing, and singing; and it will be at once apparent, that, in this school, the knowledge communicated is infinitely more extended in its nature, as well as higher in degree, than that afforded by the primary schools. Many new branches of science are taught, and all are taught much more profoundly than in the lower schools. The number of hours weekly devoted to study is the same in both institutions—the younger classes receiving twenty-six, the elder twenty-eight hours of instruction in the week.

Government and Organization of the Protestant Popular Schools.

The superintendence of all the schools is confided by the Government to the two consistories of the different Protestant sects, which are united for the especial purpose of governing the schools. From these, two members are chosen, to form a permanent commission, and under this commission again is appointed an inspec-

* The muster school or model school must be mentioned entirely apart, as it possesses peculiarities which render it impossible to class it with the popular schools in many respects.

tor, who renders a regular report to the commission, which again communicates with the consistory. Under the superintendence, but not the control, of the inspector exists the director or head-master of the middle school, and under his direction are placed a number of masters and teachers necessary for the establishment. The masters hold what is called a school-conference once a month, under the presidence of the director, when the affairs of the school, the progress of the pupils, the method of instruction, and many similar subjects are discussed generally, with amity and good feeling on all parts, and even with benefit to the institution. Public examinations also take place every six months, and on these occasions the director generally produces a tract upon some subject connected with the school or with education.

The elementary schools—likewise under the government of the two consistories—are also more directly subject to a commission of inspection. Under this is immediately the head-master of each school, whose duties are more those of director than of teacher. He examines the scholars on their entrance, assigns their class, attends to the cleanliness, salubrity, and order of the school, counsels the under-masters, and, where necessary, reports their dereliction to the commission of inspection; visits each of the classes from time to time; examines the report-books kept in each class; holds monthly school-conferences with the under-masters, and, with their knowledge and the approbation of the inspectors, changes the method and objects of instruction.

Each under-master has his particular class, of the progress of which he is required to render an exact report every three months. The discipline of his scholars, as well as their instruction, is under his immediate direction, and he is bound to keep a regular register of the attendance given by the various children forming his class, and of their general conduct therein.

Such is the simple organization of the Protestant popular schools in Frankfort, and therein for a very trifling sum may be procured all that instruction which is required for what the Germans term a burgher education—a term not without signification.

Above these popular schools again comes an institution worthy of remark on many accounts, and equally distinguished by the excellence of the system pursued in it—

This is the Muster or Model School, which carries the scholar considerably higher in the pursuit of knowledge than the middle school undertakes to do. The objects of instruction are religion, the German and French languages, history, geography, technology, natural history, natural philosophy, arithmetic, algebra, geometry, writing, drawing, singing, and the other exercises of the understanding, an excellent part of the system seldom omitted in the German schools. The school-money is higher in amount than that required in the middle school, being forty florins for each

scholar; but the salaries of the masters are higher also. The number of scholars is 500, and the funds of the establishment very nearly defray its expenses, so that the State claims no other interference, than inasmuch as the masters appointed to the model school must be confirmed in their office by the approval of the Senate.

The *Catholic Volkschulen* or primary schools in Frankfort are four in number; the female being separated from the male scholars in distinct establishments—a measure salutary in all situations where it is practicable, but still more salutary in large towns than in smaller communities. These schools comprise a lower and higher boys' school, and a lower and higher girls' school. The lower boys' school, during the winter half-year 1833–4, was attended by 225 regular scholars; the lower girls' school, 238. Each of these schools consists of three classes, and they are supported partly by the school-money paid by the parents, partly by some peculiar funds of their own, and partly by an aid from the State. The objects of instruction are nearly the same as those in the Protestant schools, with such slight differences as the differences of creed require.

The higher Catholic school, is, in fact, a pro-gymnasium, and is destined to prepare the scholars for more profound instruction in classical and scientific knowledge. The number of scholars varies from eighty to a hundred, and the school-money paid by each pupil is 30 florins annually. The higher girls' school received during the last half-year sixty-five scholars. The school-money is the same for each child as that required in the boys' schools.

The superintendence of the Catholic popular schools is confided to a church and school commission, and there is no difference worth particular notice between the organization of these establishments in the hands of the Catholics, and that of similar establishments in the hands of the Protestants.

The Jews of Frankfort have two distinct schools, the one a primary school for the children of poor parents, the other a higher school, of that sort which is called in Germany a *real schule*, or, in other words, a school for instructing youth in branches of *useful knowledge*. Both these schools are kept up by private subscription among the Jews themselves, and are immediately under a school-council of their own. The inspection of these two schools is entrusted by the State to a mixed school and church commission; but there is no complaint of improper interference by that body in the education of Jewish children.

The gymnasium of Frankfort receives 200 students, and is divided into six classes. The objects of instruction therein, are religion, the German language, with practical exercises in composition, writing, history, ancient and modern, natural history,

geography, natural philosophy, mathematics, Greek, Latin, Hebrew, French, English, drawing and singing. Of these objects the Latin language occupies the principal share of attention; and next to that the Greek, next mathematics, and next the mother tongue. History follows next, and then religion. The other studies are pretty equally divided, with the exception of natural philosophy, which, though one of those objects of instruction which is evidently the most useful to man, and which is daily rising in consideration, is here but scantily provided for in the allotment of time. With regard to several other studies, apparently neglected in the gymnasium, we must remember that considerable progress in such branches of knowledge is supposed to have been made by the scholars in the inferior schools. By a judicious arrangement, the studies likely to be useful to persons of limited means and inferior station, are more amply taught in the lower classes, while the studies, which may be considered rather as matter of luxury than of necessity, are principally pursued by the higher classes, into which many of the pupils never enter.

The funds of the gymnasium consist in the money paid by the scholars, an annual aid given by the town, and some appropriations from the State. The school-money given by each student is 44 florins in the higher, aud 34 florins in the lower classes, and the amount of the whole is generally under 10,000 florins. The expenses of the establishment are at least 25,000 florins annually, so that a very considerable deficiency remains to be supplied by the State. The amount of the school-money, however, in no degree affects the salaries of the professors, as their income is fixed by the State, which receives the money, collected by an officer of its own, and supplies the whole expenses, without leavling any question of payment between the teachers and the taught. The salaries of the different masters *are very different*,—those of the four upper classes receiving 2,000 florins annually, those of the two under classes, 1,200 florins. The amount of payment, however, to the various masters depends much upon the peculiar positions which they occupy in the school. The masters of the gymnasium are divided into two divisions; the class-masters and teachers of particular branches of science, taught separately. Thus, there are the masters of the 1st, 2d, 3d, 4th, 5th and 6th classes; and, besides these, teachers of mathematics, history, etc. The mathematical teacher receives in general about 1,600 florins, the historical teacher about 1, 200 florins. Another class of teachers exists, consisting of the drawing, singing, French, English, and some others, and the salaries affixed to the situations held by them, vary from 400 to 600 florins.

The organization of the gymnasium is very simple. In the Senate of the State remains the whole power; but the immediate

surveillance of the highest educational institutions of the city, is confided to the consistory, which comprises both lay and clerical members. Under the consistory is the rector, with whom rests the immediate direction of the establishment; and, more with a view to supply the place of the rector, in case of need, than to assist him in his duties, a co-rector and a pro-rector are appointed among the masters. The immediate discipline of each class is confided to the master thereof, and the discipline of the whole to the rector. The teachers of separate branches of science have no authority except during their lessons. In case of death or sickness, the office of each master is filled up for the moment by a person chosen by the rector. The permanent nomination, however, remains with the Senate. The candidates declare themselves, specify their claims, or submit to examination; and out of the number, three are chosen by the consistory—in almost all cases with the advice of the rector, and sometimes after a general consultation among the professors. From these three the Senate selects one, and the nomination thus made secures to the successful candidate the post for life, unless his own conduct draws upon him such judicial condemnation, in a regular course of law, as to render him incompetent.

In almost all the States of Germany, a fund for the widows and orphans of teachers is to be found, sometimes supported by private subscriptions amongst the teachers themselves, sometimes founded by the State, but often mainly upheld by donations and legacies, which is the case in Frankfort, in which city the different schools have separate widows' funds.

There still remain unnoticed a number of establishments for the instruction of youth in various branches of art and science, and several institutions for particular classes of persons. Among these are an establishment for instruction in the medical sciences, a school of arts; and a school for the deaf and dumb, etc. A number of private schools offer various other opportunities of instruction to the inhabitants of Frankfort, which presents a very fair model of a regular organized system of education.

The Grand Duchy of Baden contains about 5,929·6 square miles of territory, with a population of about 1,220,000 inhabitants, comprising in 110 cities and towns, 36 market towns, with 1,686 villages. The reigning family is Protestant, the people Protestant and Catholic, and the followers of both are religious, with no apparent difference of feeling on the subject of education, and show an equal degree of willingness in sending their children to the schools.

The Protestant part of the population, amounting to about 389,000, are taught by 790 masters, of whom 200 are assistants, in 583 schools.

The Catholic inhabitants, 814,000 in number, are instructed by 1,700 masters, of whom 300 are assistants, in 1,294 elementary schools.

The rest of the population consists principally of Jews, who fluctuate in point of number; but generally maintain twenty-eight schools in the Grand Duchy. The total number of schools is 1,905. The number of children who frequent the elementary schools is not far from 190,000. The rate of children who attend the schools relatively to the number of inhabitants is as 1 to 7. The rate of schools to the population is 1 to 641 inhabitants, and for the total number of scholars of all religions whom the law expects to attend the schools, though some are always absent, the rate is 1 to 103 scholars. There is one school also to 3 miles 3-27ths, and more than one to each considerable hamlet.

This is a magnificent establishment—most magnificent, considering the extent, the degree of wealth, and the population of the land; nor are the means for supporting this establishment less worthy of notice and admiration, although the people of Baden still feel that something remains to be done, and are anxiously striving for its accomplishment. The funds for the support of the Volkschulen, or primary schools, proceed from three separate sources; and this arrangement, originating in the changes of times and circumstances, rather than in any uniform and synchronical plan, has been found to possess very considerable advantages, if there exist also some disadvantages.

First. The Volkschulen is instituted, organized, and superintended by the State;—from the State likewise is derived that portion of the funds necessary for their support which is not supplied by other sources.

Second. Each individual parent whose child derives benefit from the institution, is called upon to contribute his part towards its maintenance.

Third. Various sources appropriated to the same purposes prior to the establishment of any general system, have, of course, been retained to diminish the burden of the State and of the parents. From these three sources the Volkschulen derive their support.

The amount paid by the parents, is very difficult to ascertain, as it varies in different years; but although the sum demanded for each individual in some parishes is not always the same as in others, it is always moderate in amount. It is, however, very generally believed throughout Germany, that education, like other things, is not valued unless it be purchased, and consequently the system of school-money is almost universally advocated by those who have a practical knowledge of the effects.

There are twenty-nine higher schools and two universities.

Besides these, there exist in Baden five other excellent educational institutions, namely, a polytechnic school, a deaf and dumb school, a school for the blind, and two distinct seminaries for Catholic and Protestant school-masters, each excellent in its system and organization.

The organization of the educational establishments is extremely simple. With the Minister of the Interior rests the principal moving power, while to the clergy is committed the general superintendence. The Bishop, of course, is at the head of the clerical branch of the administration; but each large district has its deacon, whose especial office it is to superintend, direct, and govern the various schools within his department. Under him again, the immediate superintendence of the school is confided to a committee of the parish council, presided by the clergyman of the place, whose duty it is, by constant visits and examinations, to make himself thoroughly acquainted with the state of the schools, and the conduct of the masters therein, to counsel, advise, and reprove them when necessary: and in cases where the master is either obstinate in error, or firm in opposition to the clergyman, who has no power of compulsion, the question at issue between them is brought first before the parish council, thence, if still unsettled, before the deacon, and ultimately before the grand ducal council for public instruction. In addition to this regular organization, each large district has a certain number of inspectors, whose duty it is to hold a public examination of each primary school, at least once in the year, and to make a general report of the state of each to the government. The method of instruction, however, and the general discipline of the school, though very strictly laid down by law, still depend greatly on the master.

The extent of instruction, is very various in different schools, according to the capability of the master, and the situation of the parish. Reading, writing, arithmetic, history, geography, geometry, and singing are taught in all the schools of Baden; and a thorough knowledge of the chief doctrines of the christian religion is invariably communicated in all christian schools.

In the greater part of the German States a law* for compelling attendance upon the schools is to be found, and certain punishments are appointed for its infraction; but in general, the punishments actually inflicted are merely indirect, without any appeal to either a police or justice's court, and brought about by natural and unobjectionable means. For instance, in most if not all of those States, no one can receive confirmation, or the first communion, without due attendance on the schools; in many others, no man

* God forbid that civil liberty should be ever so far forgotten in this country, as to permit a system of compulsory education to be introduced into our native land.

can become free of any trade without such attendance; and in many, according to law, no one can take up any of his burgher rights without being able to read and write. These are easy means of enforcing education, and especially might be rendered so in countries where political privileges are dear. In Nassau, however, a law not only exists for enforcing education by sterner means, but that law is carried into execution with steady perseverance. In countries, however, where education is compulsory and the law is enforced, it follows, almost as a natural consequence, that the means must be supplied by the State. In Nassau, therefore, education is given to all without any direct demand upon those who profit by it. The community of course pay for it in a body, but they do so indirectly, and no school-money is required from the parents whose children follow the schools.

The Duchy of Nassau contains, as near as possible, 1,735 English square miles, with a population of 362,652 souls, the younger part of whom are instructed by 850 masters, in 680 primary schools. These 680 schools received, during the year 1833, the immense number of 66,535 scholars, while about 500 youths were educated in the higher government establishments, and a considerable number in the private schools of Nassau, amongst which are some of the best in Germany. This gives an average of rather more than one scholar to six of the population, 77 to each teacher, and 98 to each school.

The Volkschulen or Primary Schools.—At six years of age, each child not supplied with other education, (the reality of which education must be proved to the satisfaction of a government officer and school inspector,) enters the Volkschulen, in which he remains six hours every day, with the exception of Sunday, Wednesday, and Saturday; the whole of the first, and the afternoons of the two latter days being left free. During eight years his studies in the primary schools continue, two years being assigned to each of the four classes into which the schools are divided. In case of earlier proficiency, however, sufficiently proved by the public examination, the scholar can pass from a lower to a higher class before the specified time.

Each class is divided into two parts, and in these eight divisions, the child receives instruction in religion, morals, the German language, reading, singing, arithmetic, writing, composition on given themes, generally confined to subjects of every-day utility, together with the elements of geography, history, natural history, natural philosophy, and the economy of health, as well as some general knowledge of agriculture and manufactures. All these objects of study are taught from books, accompanied with the teachers' oral explanations. The religious instruction is communicated by the clergyman of the persuasion to which the parents of the children belong. For the purpose of facilitating the objects

of education, each school-house is furnished with a small school library, and with what is called a school apparatus, or large tables of figures, letters, etc., for teaching the younger children; black boards for carrying on calculations before the scholars, maps and globes, etc. To the school-house, which must be supported by the parish, is in general attached a garden, a fruit-tree school, and a play-ground.

Each head master has one or more assistants, whose salaries vary according to circumstances; and when he becomes unfit for further service by any natural cause, but sustains a good character, he is entitled to a pension of at least one half of his former salary for life. And the widows and orphans of school-masters are provided for by an especial fund.

As far as possible, separate schools are established for the two sexes. In spring, fourteen days holidays are given, and in autumn four weeks.

The duties of the superintending committee of the popular schools are similar to those already referred to.

The higher schools afford instruction in the higher branches with their application to the ordinary affairs of life. Nor is the intellectual and corporeal education alone attended to; for, drawing a line between intellect and feeling, a regular system of education is pursued in taste and moral feeling.

The educational system of Germany presents various features of interest; but we hope that this brief outline will be sufficient to show that although the system of Prussia is excellent, yet valuable hints may be derived from the German States.

The educational system should not be a system of mere *experiments.* It should be a steady, uniform, constantly operating power, receiving light and vigor from every available and correct source.

PLATO ON THE CHIEF END OF EDUCATION.

BY ALEXANDER KINMONT.

Plato was really a philosopher, and knew what philosophy is and ought to be. It is true, he did not always confine his speculations within "the visible diurnal sphere;" but this *modern* philosophy, correctly named *mental science,* has atoned for all his

wanderings; she has punished herself for the daring flights of Plato; and ever since Bacon told her, or rather Bacon's *footmen*, that it is dangerous or even impious, to rise above the region of *facts*, or in Plato's own language, the *shadows* of ideas,—she has very modestly contented herself with the classification of these *facts* or *shadows*, and is better pleased to hear herself called *natural history*, or the *history* of mental phenomena, than *philosophy*.

But it is useful to learn what kind of speculations was wont to engage the minds of men in ancient times; and although very unlike our own *pedestrian* excursions on the terra firma of modern *factisms*, it will enlarge our conceptions of the diversified powers of the human mind, to recall the features of their bold philosophy. For this reason I have *interpreted* a portion of Plato's Republic; in reference, mainly, to the first or essential idea of education, that which respects the attainment of "the Good," which in various parts of that treatise he speaks of, as the appropriate end of all Education; and according to which he requires that all the youth of his commonwealth be moulded and trained.

Socrates and Glaucon are the *dramatis personæ;* and the others spectators or hearers, their friends and admirers,—who sometimes interpose a remark. This is not a continuous translation, but the *entire* original can be found at the close of the sixth and beginning of the seventh book of the Republic.

SOCRATES, GLAUCON, etc.

Soc. Yes, truly, there are many other introductory *ideas*, the steps by which to ascend the Temple of Wisdom; but this is the very *throne* of the Divinity itself.

Glau. You mean the IDEA OF THE GOOD.

S. Yes, and when this IDEA is once seen, all others come trooping most willingly and spontaneously in its train, a queen-like retinue;—for the Useful, the Beautiful, and the True are known so soon as the Good is known; but until this be recognized, it is in vain that we take an estimate of our other mental acquisitions; for there is nothing *real*, there can be the *apparent* only, where this god-like light, the illumination of the GOOD, has not beamed.

G. By the gods, Socrates, you speak most truly.

S. But you are not ignorant, you! that the thoughtless *many* esteem Pleasure and Good as one; and those that plume themselves on their wisdom, tell us that the Good is to be found in Intelligence.

G. And are they not right, Socrates?

S. How are they right?—for what is this Intelligence?

G. Why, it is—it is—the Intelligence, it is the Knowledge—of the Good.

S. And Good is the knowledge of the Good!

G. Absurd enough, Socrates, I confess; but what then?

S. What then! Shall we say that those are less in error, who declare Good to be Pleasure; although all pleasures are not good, but there are some good, and others very much the contrary.

G. They seem to me as remote from truth as the other.

S. There are many difficulties which surround this question.

G. I perceive a great many.

S. And yet you will confess that none here would willingly put up with uncertainty, none would prefer, if he knew it, apparent to real good; for the good which each pursues, for the time he fancies real. For here it happens not, as in other cases, that one is willing to take opinion and appearance for the things themselves. Many will be contented with the *seeming* just and *seeming* fair, for they serve all the purposes of selfish glory; but who is willing to cheat himself as well as others, and to take what he himself believes to be the *shadow* of Good instead of the *substance*. Opinion here is in no estimation; the *real* is truly sought for, although constantly misapprehended.

G. It would seem so.

S. That, then, which every soul pursues, and toils most strenuously to reach, using all resources of conjecture and divination, ever inquiring and yet never resolved, unwilling to trust to the voice of report, and ready to abandon all its other possessions, so it might arrive at the goal, the sum of all its wishes and expectations—the Good,—surely respecting an object so engrossing as this, the end of all other things, it least of all becomes those to be in the dark, who are the honored and select of the commonwealth, and to whose hands we are to entrust its management and defence.

G. If others can be safely ignorant on such a point, at least they cannot.

S. But the Just and the Fair, when Good is unknown, are but useless acquisitions, if indeed it be possible to reach these at all in such a case; but I divine that the thing is altogether impossible.

G. And the divination seems to me plausible.

S. And yet if the guardian of the republic did not know what was just and fair, could he manage the State skilfully?

G. How could he, Socrates? But come, tell us at last how it appears to you: is Good Pleasure, or what is it?

S. I understood Glaucon to say, some time ago, that he did not value what *appears* to be, but only what *is*.

G. It is impossible, Socrates; no refuge shall serve you; you must unfold to us your own opinion once for all; we have heard enough of what others think.

S. But what, Glaucon, do you not see that all opinions unsupported by knowledge, are things of no value; the very best of them are uncertainties; and those who chance to find a right

opinion without intelligence, can they be said to differ at all from the *blind*, who can sometimes discover their road even without the use of eyes.

G. True, the cases are analagous.

S. Would you have me, then, exhibit a disgraceful spectacle before you, showing you dark and conjectural opinions, when you might hear from others what is clear and certain.

G. But not even thus, Socrates, can we permit you to escape us;—for the day shall not set on the Athenian hills, until you have discoursed on the Good, as you have on the Just and on the Fair.

S. But it will be sufficient, my friends, that I can show you what is probable; and yet I shall not be able to manage it so as not to incur the ridicule of too much philosophy. But of Good itself I can speak nothing now, (for it were long ere I could reach even the verisimilitudes here,) but of that which seems to me the offspring of the Good, I will speak; or shall I be silent?

G. Nay, by no means; for we may trace the Father in his lineage.

S. I wish it may be possible; but do you watch me closely, that I may not palm upon you an illegitimate offspring.

G. We will watch, but do you speak.

S. But it has been agreed among us that there are many things that are separately esteemed good, and just, and fair.

G. Why not?

S. And yet it is not these we seek?

G. No, but the Good, the Just, and the Fair, or the offspring of the Good; we want to hear what that may be.

S. But we agreed that some things are seen, and not *minded*, but that ideas are *minded*, and not seen.

G. That is altogether so: the Senses notice, the Mind perceives.

S. And that by which we see?

G. Sight.

S. And that by which we hear?

G. Hearing.

S. And so of the other senses?

G. Yes.

S. But have you not observed that Divine Artificer of the senses,—how perfectly he has constructed all of them, but that one of Sight, with an addition of wonders.

G. I do not altogether understand you.

S. I am thinking now not so much of the mechanism of the organ, (but here, too, O Glaucon, the Gods have shed a profusion of skill,) but I reflect on the glorious Third, which interposes between the Two.

G. You speak obscurely, Socrates, or mystically, like the Pythagoreans, on numbers. I do not understand you.

S. It is not so difficult; you observe there is the Power of seeing?

G. Yes.

S. And the Power of being seen?

G. The color and stability of objects,— I understand.

S. But there is wanted yet the Third; and what is that?

G. Light, I imagine.

S. You speak rightly; and this it is that fills the other two, and makes them be what they are,—*seeing* and *seen*.

G. It is most evident.

S. And so that noble Power of Seeing, and its counterpart the Faculty of being seen, a Divine Pair, are connected together by the supernal Bands of Light.

G. And it seems to be a most astonishing conjunction, Socrates; and I wonder how vivid and prolific it is.

S. And yet, can you tell me to which of the gods we stand indebted for this donation—light, which gives the means of *seeing* and being *seen*.

G. You need not ask that name—the Sun.

S. And so the act of seeing stands thus naturally related to this god?

G. Surely.

S. And yet the Sun is not the act of seeing, nor that organ, in which it is.

G. Not at all.

S. But yet that organ is the most Sun-related of all the other senses?

G. Much the most.

S. And that faculty which it has, is a borrowed power, fetched, and rushing downward from this fountain.

G. It so appears.

S. Understand me then to say, that the offspring of the Good, (and the Product is the image of the Producer,) bears that relation to perception and the ideas which are perceived; that this light does to the Power of seeing, and the objects which are seen.

G. How? Explain more fully.

S. You know that when the eyes are directed towards objects not illuminated by the light of Day, but hid in the obscurity of twilight, they are pained, and affected with a sensation of blindness, since there is wanted a pure light.

G. Yes, indeed.

S. But when the Sun has shone, they see clearly, and the very light seems as if *infused* within them.

G. Most certainly.

S. Think thus also of the soul: wherever Truth or actual Being has shone—for that is the light and the offspring of Good, the soul *knows* and enjoys certainty, and feels *mind* within; but

when it turns on that which is still confounded with darkness,—and what is this but the *apparent* and not the real, that which is born and which perishes,—then it no longer *knows*, but harbors opinions, and is bewildered, and now resigns, and now resumes its notions; and is indeed the soul, but without the mind.

G. Its actions would seem to indicate that this were actually so.

S. Call then, this which confers reality on all that is known, and on him that knows, the faculty of perceiving—call this, O Glaucon, the representation of Good, and say also that Good is the parent of Knowledge and of Truth, when these are apprehended by the Mind; and so both Knowledge and Truth being beautiful, if you shall suppose that there is that which is more beautiful than either, and that this is Good, you will deem rightly; and, as we have before said that Light and Vision were not the Sun, but the most Sun-related of all things, so now we affirm that Knowledge and Truth are not THE GOOD, but are the most symbolic and expressive of it,— being stamped its lineage; but that still *the Good* is more honor-worthy than either of them, which are of posterior descent.

G. What astonishing beauty, if indeed it be so, that this should afford us knowledge and truth, and rise in beauty above them both.

S. You would the more say so, Glaucon, if you reflected that the Sun, which is the image, not only renders all objects visible, but is the means by which all things spring up, and grow, and are nourished, yet not being itself their birth or their growth; and so we say that from Good is derived not only the reason that things are known and learned, but also the very being and substance of them is from thence, and yet Good is not these same things; but rises above them all in precedency, and dignity and the honorableness of Age.

G. By Apollo, Socrates, but you seem to me to soar unto a region of divine extravagance.

S. And what matter, then; since by your persuasion, I undertook but to utter opinions, and these are but a small part of them.

G. But you shall not yet discontinue.

S. But I will not willingly omit, what it may be possible to learn.

G. Do not, then.

S. But mark, there are the two, the Visible and the Intelligible.

G. The Visible you call Place, and all that falls under it, and is seen.

S. Yes, and the Intelligible has its Place; not this shadow of Place, which you call Place, but the thing itself.

G. But is it the idea of Place?

S. Yes, but the idea is above the shadow, and more a thing;

and the Place of the Intelligible is more real than the Place of the Visible.

G. That is certain, Socrates.

S. But the Place of the Visible is the *lower* and the ground of the other. Do you understand me?

The figures which the lovers of Geometry trace, are not the very figures to which they rise, and which they see.

G. No, they are but the imperfect delineation of them, and those which the mind sees are the real figures.

S. These then are the *high* and *above*, *higher ;* the obscure tracings in the sand, the *lower* and *beneath.*

G. True.

S. Here, then, I imagine, are seen the character of the Visible and the Intelligible; and that each has a distinct Place, but the *lower* is the shadow of the *higher.*

G. I comprehend sufficiently, the Visible and the Intelligible, and mark the two.

S. But the visible then is without.

G. Why not?

S. And I think it will help us to understand the difference between opinion and truth, the apparent and real, in the Place of the Intelligible.

G. Surely.

S. You know, then, there are things which are seen, and their shadows and images.

G. Truly—the shadows or images.

S. And in water, how do they appear, Glaucon?

G. Very much as the things themselves.

S. There are the rough and the smooth reflected, the brighter and the obscurer parts—the whole is there.

G. Yes, and often vividly, Socrates; but the image only, not the thing.

S. What then, in respect to the region of the Intelligible?

G. What?

S. Cannot we say that opinion differs from Truth, and verisimilitude from reality, as the imaged likeness differs from that which is reflected.

G. For myself, Socrates, I see how justly they are compared.

S. And you recall to mind the source of the Light.

G. The Sun—that is the name.

S. And the parentage of the TRUE we have also discovered.

G. We found it most undoubtedly to be the GOOD.

S. Mark then the Three—how they front us on our path.

G. Yes, and after some wandering.

S. And we call them THE GOOD and THE TRUE; and that Third which we shall call the Truth-like,—which is opinion.

G. And we might also add a Fourth—the Conjecturable.

S. Be it so; and related to the first is Reason, to the second is Understanding, to the third Belief, and to the fourth, uncertainty or blind hazard.

G. There are all those proportions, Socrates, and others besides. I consent to this distribution.

* * * * * * *

S. Take a similitude; in which we can see human nature, when instructed and when rude. See men as it were in a cave—under the earth,—their dwelling, having a long and dark passage, terminating in the light—and here see them from childhood bound in chains, neck and limbs—their backs to the light,—in that position, and looking inward on their cave, but unable from their chains to turn their heads round;—but the light of a fire from above and from afar, behind them, so placed, that the shadows of things can be flung inward on their cave,—in some way resembling the contrivances of those wonder-workers who amuse the people.

G. I see all this.

S. See next, persons passing between this light, and the entrance of the grotto, and leading along the images of all terrestrial things—plants and animals, of stone or wood—sometimes speaking aloud, sometimes silent, as is usual when men are employed.

G. This is a singular assemblage of objects, and a singular representation, Socrates; and those within chained are in a strange predicament!

S. Not more strange than that in which all are, Glaucon. For now do you suppose that they will behold any thing more of themselves, or of each other, but their shadows cast on the front and sides of their grotto?

G. What else can they, if their heads are confined immovable, and they can look only straight forward all the time.

S. And of the things that are led across the mouth of the grotto?

G. Neither can they see any thing of these, but their passing shadows.

S. And suppose they could converse; do you not think they would name these flitting shadows as realities?

G. They could not do otherwise.

S. And if you conceive in the grotto an Echo from within, and that those who passed at the mouth, spoke aloud, would they not believe that the shadows they saw also spoke.

G. I can easily believe it, Socrates.

S. Altogether, then, persons in this situation must suppose that to be truth which is entirely and unequivocally Shadow.

G. I cannot see how they should think otherwise.

S. Reflect, now then, and see them loosened from their chains, and delivered from this necessity of folly, which presses upon

them, for we can imagine that *naturally* done. When one is first made loose, and urged suddenly to ascend upwards and to turn his head, and to walk out,—while doing so, and the glare of the light pained his eyes, and rendered him unfit to see steadily the things of which he had before witnessed the shadows,—what do you think he would say, if any one should tell him, that what he had before seen were phantoms,—but now being turned on real objects and beside them, he saw truly,—and pointing out each thing, should question him concerning these,—do you not think that he would hesitate, and believe those things, which he had before looked at, to be more true than such as were now shown to him?

G. No doubt he would.

S. And if in his ascent, one should compel him to look at the light, would it not gall his vision, and incline him to turn away, and to fancy what he had abandoned, really more distinct, than what he was approaching?

G. This is clear.

S. And when at last he came full on the Light and the Sun, could he bear either?

G. Not suddenly.

S. But he must be accustomed to bright objects by degrees; and at first he could most easily look at the shadows of them cast upon the ground; and after that, he could look on the images of men and other objects in water, and then at themselves. After this, he might raise his eyes to Heaven, but more easily at night, more gladly beholding the light of the stars and of the Moon, than that of full day and of the Sun.

G. Such would be the succession.

S. But last of all he would survey the Sun, and not in its image reflected from the streams, nor yet its shadow in aught yet fainter,—but the Sun, in its native place; he could discover and see its own roundness and its splendor. You still see him, Glaucon?

G. Yes, and I see the images not indistinctly of a *restoration*, and the *series;* or I think I do.

S. Right,—especially after this *freed-man* has learned also about the Sun; that it is this which gives the divisions of the Seasons, and the Days, and bears a superintendence over the visible Region; and of all which is beheld, is after a certain manner, the cause.

G. I see *resemblance* still.

S. But what then, when he now recalls to mind his former sojourn, and the wisdom in fashion *there*, and the situation of those who were his fellow-bondmen,—do you not think he wonld congratulate himself on his change of condition, and pity them?

G. Assuredly.

S. And if there were any honors or distinctions among them, or rewards assigned to those who could note most sagaciously, the passing phantoms, and the usual antecedents and consequences among them, or those which are constantly separated, or constantly together,—and from thence divine the coming images, and the times of their arrival, and their infallible succession—do you suppose he would covet the honors that belong to such successful observations, or envy those that are in high esteem and power there on account of such attainments—or would he not be of the mind of the Ajax of Homer; and rather be

> "A slave to some poor hind that toils for bread,
> Than reign the sceptred monarch of the dead;"

or indeed, endure any thing rather than earn distinction there.

G. He would rather suffer the worst here, than seek such honors there.

S. But should he again descend thither, would he suffer no injury; and could he as distinctly view these shadows as before?

G. Not until a lapse of time, Socrates.

S. But if he should tell his former associates what he had seen?

G. They would laugh at him.

S. And would they not also say, that any one who should go up from the place they were in, would blind his eyes and deprive himself of the true felicity; and that it was not worth the trouble to try to ascend, and that if any should endeavor to loose them, or conduct them up,—if they could lay their hands upon him, he should be put to death?

G. No doubt they would think it meritorious to put such a one to death.

S. And now, beloved Glaucon, the whole of this similitude is to be applied to what we have said before on various topics. And if you will consider this visible residence,—the earth, as represented by that dwelling and its chains,—that light of the Fire above and afar at the entrance of this grotto-prison, as a likeness of the Sun and its influences; and if you will consider the ascent from the grotto as the Sign and Mark of the elevation of the soul into the region of Intelligence, you will not mistake my *Hope* on these subjects, since that is what you desire to hear; but whether it be a true Hope or not, the Divinity alone can tell. But what appears to me as real, is thus unfolded: In Knowledge at last is presented an image of Good barely visible; and yet Good even so seen, can be gathered to be the cause of all things right and fair,—even in the visible region producing a dark image of itself, in the Sun-Light and in the Sun; but in the intellectual region—

the Mistress and Queen; and Truth and Intellect are the effluences of her Mind;—and here, under this her own Idea, all must behold her, who would act skilfully either in a private or a public station.

G. I also think so, so far at least, as for my own part, I am able to understand.

* * * * * * *

S. The senses, then, are conversant only with their own *objects;* they do not perceive *number* or *proportion.*

G. So it appears.

S. And these two bring the mind *up* to Truth from the sensible region?

G. In a most remarkable degree.

S. The knowledge, then, of number and proportion, is a part of the learning of the Guardians of the State: for to the warrior these are necessary to marshall his troops in battle; and to the lover of wisdom who would rise beyond the *sensible,* the *begotten* to that which *is,* and to the *Truth,* it is indispensable.

G. It is so.

S. I say then, O Glaucon, that we must persuade our youth; those who are to be the guardians of the Republic—for these must be both Warriors and Philosophers—to study this Science of number and proportion, which the Sophists call Arithmetic, not merely to have an *obscure* smattering of it, for their private use; but to obtain a clear view of the nature of it, by the *mind* and not by the *senses,* and that not for the purpose of buying and selling, as if they were to be only hucksters, and traders, but for the nobler end of War; and the invigoration of the soul, that so their minds may be converted from that which is *apparent,* to that which is *real,*—from the *offspring* of Truth, to Truth itself.

G. That is a most desirable and glorious end, O Socrates.

S. The consummation of the Man, I should imagine, Glaucon.

G. Surely; but all are not disposed to be Arithmeticians in this higher sense.

S. Those who are naturally Arithmeticians, are more acute than other men, and acquire more rapidly all kinds of knowledge; but the dull can be sharpened by this Science, and their faculties greatly improved.

G. Indeed it appears so to me, if not learned, as you say, merely for huckstering, or trading. But what seems to you next best to be taught, Socrates?

S. You know that which they call Geometry?

G. It is of much use to a General.

S. A slight knowledge will serve all his purposes, and chiefly the sensible and the practical parts of this learning.

G. What would you say, Socrates?

S. I remind you of the Grotto; and do you not think it of the greatest importance that the soul should be brought to the Light?

G. Surely.

S. And to the perception of the Good?

G. Surely.

S. Consider, then, Geometry is not the Light, or the Good, but it compels the mind to abandon its dark retreats, to loose its shackles, and to approach the limits of this Region, where the Divine and the Essential can be beheld.

G. And the youth of the Republic, you say, should acquire Geometry for that reason: do you not, Socrates?

S. I do so most assuredly, O Glaucon; for, my noble friend, it is this, when pursued rightly, which will be constantly drawing the soul Truth-wards, and will be forming that faculty of the philosopher, which inclines the soul to ascend, and permits it not to grovel always in the limited and obscure.

G. When pursued abstractly, it seems to me to have such tendency.

S. And those ordinary advantages are not slight.

G. What are these?

S. Its use in War, and other Arts; and indeed as respects the acquisition of all kinds of learning, there is the widest difference between those who have never touched Geometry, and those who are imbued with it.

G. By all means, then, O Socrates, the youth who are to be the guardians of the Republic must study Arithmetic and Geometry: since these do not depress but elevate the mind; and conduct it in that way which may lead at last to the True, the Good, and the Essential.

S. You are right, Glaucon; for even this Science of Numbers, and this Geometry are not themselves the very True or the very Good, although they may serve as indications of the turnings of the way that leads thereto.

G. What is next, Socrates?

S. That which is called Astronomy; but after we have walked to yonder part of the Garden, we may be able to consider that subject with more advantage.

G. We shall.

A LECTURE ON EDUCATION.*

BY JOHN D. CRAIG, L. L. D.

Man is a being susceptible of pleasure and pain; of happiness and misery; and is impelled by his nature to pursue the one and avoid the other. He is formed for society, and there finds his proper sphere of action, and highest enjoyment. He is, moreover, a rational being, capable of knowing right and wrong, and therefore accountable for his conduct. Hence arise three distinct classes of duties he has to perform; namely, one to himself; another to the community to which he belongs; and a third to his CREATOR. The first includes his own preservation, safety, welfare, and happiness. The second, all he owes to society, in return for the security of life, liberty, and property, which he enjoys under its protection. The third embraces all the duties he owes to that BEING from whom he derives his existence; to whom he is indebted for all he has, and to whom he is accountable for all his conduct.

It is the province of Education to apply the most effectual means for unfolding the natural powers and faculties of man, so as to fit and qualify him for the proper discharge of these duties: a task of the utmost importance, as will appear by contrasting the character and condition of the uncultivated Child of Nature, with those of his more fortunate fellow-creature, who has enjoyed and improved the advantages of a well conducted education. In the one we behold a miserable being, perhaps naked and houseless, exposed to the inclemency of every season; frequently enduring intense sufferings, from the unsupplied cravings of nature; and gratifying these cravings, when chance affords the means, to the most disgusting and brutal excess. Yet untaught by experience to guard in future against such calamities, he dozes away his days in stupid indolence and slothful inactivity, till the demands of Nature once more rouse him into action. To him the Book of

* We have been furnished with the above article by Dr. Craig, which was delivered by him, as a Lecture, before the College of Teachers, held in Cincinnati, October 10th, 1835. The sentiments which are expressed in it, are entitled to deep consideration, and cannot fail of having due weight upon the public mind, coming as they do from one, profound in scientific knowledge, and experienced by the labor of forty years in the education of youth. ED.

Nature is continually open, but he perceives neither its beauties, its Author, nor its end. The glowing firmament, with all its splendor, has no interest for him, beyond lighting him to his prey, or conducting his treacherous steps to his meditated victim. In his breast, instead of pity and the tender charities, vindictive rage and fell revenge reign uncontrolled, with demoniacal fury, which nothing but blood and slaughter can appease. If he ever lifts his thoughts towards an over-ruling Being, it is to one whom his fears clothe in terror; one who, like himself, delights in cruelty and blood. When arrived at the closing scene of his precarious life, the dark cloud which hangs over that eventful hour, is not pierced with one ray of rational hope, to point out a mansion of rest beyond the grave. If that "longing after immortality" which seems instinctive to man, should picture to him a state of future existence, it is one, he is to enjoy in common with the brutes that surround him; and where brutal appetites are to be gratified to satiety.

But let us turn from this melancholy view of human nature, and contemplate the man, whose more fortunate lot has been cast in the midst of a well-regulated community, where the fruits of education have arrived at maturity, and shed their benign influence over all its institutions. Behold him surrounded with every comfort and convenience which a reasonable inhabitant of earth could desire, with a capacious, cultivated mind, purged from vulgar fears and prejudices. Accustomed in youth to the needful restraints of salutary discipline, he bears the unavoidable ills of life without repining; and enjoys its comforts with rational delight. With a philosophic eye, he surveys the physical and the moral worlds. From the grassy leaf to the spreading oak; from the meanest reptile to his fellow-man; from congregated grains of sand, to yonder starry canopy, with all its dazzling wonders; from the lowest grade of animal instinct, to the highest endowments of created intelligence, he can find a subject of rational and instructive entertainment. But he stops not here: he traces the intricate windings and economy of Nature; investigates her laws and energies, and subjects them to his use, in the abridging of labor, and adding to the comforts and conveniences of life.

While performing the duties he owes to himself, he is promoting the interest of the community to which he belongs. His cultivated mind devises plans of public improvement; and he finds his highest enjoyment in the prosperity of his country. The selfish passions become expanded into benevolence, and yield an exalted pleasure that sordid selfishness never knew. He rejoices with those that rejoice; and, if he cannot dry the tear of woe, he pours the balm of consolation into the wounded heart, and weeps with those that weep.

Still, however, far higher concerns engage his attention. He looks within himself, and there discovers a substance of celestial origin, that is to survive the wreck of matter and the crush of worlds. He looks abroad, and beholds every where, the evidence of design, the stamp of intelligence, of wisdom and benevolence. He perceives beyond the apparently confused state of things, a system of moral government, which could proceed from no other source than that of consummate wisdom, prompted by unbounded benevolence. Of that moral government he considers himself a subject, and consequently, under the protection of its Governor. He can therefore look forward with confidence, to a time when the natural evils and disorders, incident to the present state of things, shall be entirely done away. In full confidence that a moral governor presides over the destinies of the Universe, the closing scene of his earthly performance, instead of being enshrouded in doubt and darkness, is illuminated with that LIGHT which discloses to his view, future prospects, large as his most extended aspirations, and lasting as duration itself.

Such are the different characters, conditions, and prospects of two beings, originally equal; for the infant of the savage differs not in capacity from that of the polished citizen. In both are folded up, in embryo, the same powers and capacities; and in both susceptible of the same high destination: but in the one, they are suffered to lie dormant, or to shoot forth in a frightful assemblage of ungoverned appetites and passions;—in the other they are gradually unfolded, directed, cherished, and matured by education.

But it may be objected to these high claims in favor of education, that many, who have enjoyed its utmost advantages, have been prone to gross vices; governed by unbridled passions, and totally regardless of moral rectitude. This may be true, and yet derogate nothing from the importance of education; for great as its influence is, it is not capable of subverting nature; or of totally effacing the characteristic stamp with which she has impressed the individual. Within the limits of the human frame, Nature displays an endless variety in the structure and organization of the several parts, all closely connected with those powers and faculties, afterwards to be unfolded. The organs of sense, through which all our knowledge of the external world is conveyed to the mind are, in some remarkably acute, and in others, equally obtuse. Between these extremes, is to be found an endless variety, differing by imperceptible degrees. Hence the facility with which individuals imbibe knowledge is not only very different; but the impressions of the same perceptions will be very different on different minds: and though skilful attention to the different capacities of youths may in some measure obviate the difficulty, it can never wholly remove it.

But farther, Nature implants the affections and feelings of the heart, and gives them very different degrees of strength and intensity; and though it be the province of Education to cultivate and cherish them, and to prune their luxuriance; yet no culture will ever reduce them, in different individuals, to the same standard.

Again, Nature plants the appetites of the body, and the passions of the soul, and it is the province of education, by exercise and discipline, to unfold and strengthen the faculties of reason and judgment, that they may control these appetites and passions, so as to keep them within the bounds prescribed to rational, responsible beings. And when education has, to the utmost extent, performed its task, some untoward circumstances may occur, to defeat both its end and design. Bad example;—bad company;—bad advice, exerting their influence on strong natural propensities, may render abortive all that education can perform, and precipitate the object of our fondest hopes and expectations, from the proud eminence of human accomplishments into the depth of human misery. But education is not chargeable with such misfortunes. If it cannot surmount every obstacle, nor erect a barrier against every inroad to vice, it is no more responsible for the failure than the volume of Divine Truth is, with not having extirpated vice and immorality from the earth.

Perhaps this view of the subject, instead of lessening the value of education, might, if duly considered, add greatly to its weight by shewing the importance of *one* of its constituent parts, which, it is to be feared, is greatly neglected. I mean that due degree of wholesome discipline, and restraint, which the constitution of our nature, and the well-being of society require. Yes, to that *undue* indulgence given to youth from the nursery to the university;—from the cradle to the work-shop, in a great majority of cases, may be ascribed, not only those *superficial* literary and scientific acquirements, so common to be met with; but also that impatience of control; that contempt of authority; that defiance of all law, civil and Divine, which is become so prevalent.

It is not to be expected that the youth whose every caprice has been indulged; his desires complied with; and his passions permitted to govern his conduct, will submit to the labor which is indispensable in the acquisition of useful knowledge: and as little reason is there to expect, that those who have been indulged in disobedience to parents and teachers will, when their unrestrained habits are confirmed, peaceably submit to any other authority. Parental authority is the foundation of all earthly authority; and where it is neglected to be enforced, or permitted to be disregarded, there is little hope that any other will be obeyed. Train up a child in the way he should go, and, *probably*, when he is old he will not depart from it; but train him up in the way he should NOT go, and when he is old you may rest assured he will not

depart from it. I tremble to think of the awful responsibility of parents; and all who suffer those committed to their care, to grow up in habits of disobedience, under the influence of their own wills and unrestrained passions. But on this subject I will not dwell at present. The error is become so prevalent; so *popular*, that I fear the experience of its baneful consequence, will be the only argument sufficient to dissipate the delusion. I will therefore turn to another subject, on which perhaps, my opinion may be as unpopular, as on that I have been speaking. It is the alleged wonderful improvements and facilities in the modes of teaching, that have been introduced among us during the last twenty years: by which, if we are to credit their advocates, greater progress may be made in a specified number of hours, than formerly in as many months. It must be granted that the old methods were both tedious and laborious. Children were compelled, not only to know their letters, but even to spell words, before they were suffered to read. Penmanship now taught in a certain number of lessons, was the employment of years. Preparatory to arithmetic, the memory had to be loaded with the multiplication, and other tables: and the whole five common rules of arithmetic learned, before the pupil was thought fit to enter on either Algebra or Fluxions. As for Geometry, there was no *"Royal road"* then known to its temple. The student had to travel through eight long books of that long-bearded Grecian, called EUCLID, before he had any claim to a knowledge of that science. Nor was there a single patent machine for the teaching of Grammar.

I think it is the Vicar of Wakefield who tells us, that his lady valued herself very much on account of her economy; yet with all her economy the family never grew rich. Just so it is with all the modern improvements of teaching. I have not been so fortunate as to meet with any better scholars lately, than were to be found thirty years ago.

That improvements have been introduced into the art of teaching, as well as other arts, I acknowledge with great pleasure. And that a number of useful books have been compiled, for schools, highly conducive to the progress of the pupils, is also to be admitted; but it is to be feared, *speculation* has carried this part of the business to an injurious length. But the great cause of complaint is, those *superficial*, *hot-bed* sytems of education, through which the pupils are hurried from one subject to another, in such a manner as to preclude the possibility of being grounded in any one of them. They are taught every thing; but learn nothing, as it ought to be learned; though the parents are led to believe they are making a wonderful progress. These systems are certainly well calculated to gain the approbation of those advocates of juvenile indulgence, who cannot consent to youth being subjected to either restraint or labor, beyond their own pleasure.

How far the systems are modified with a view towards gaining such approbation, I do not pretend to form any judgment; but I will venture to assert, that human nature must undergo a great change, before such systems will add much to its improvement.

We have good authority for believing that our first parents were ushered into the world in a state of *organic maturity;* and, had their minds not been enlightened by supernatural means, their inexperience of their own nature;—of the world around them, would have rendered them no better than a pair of idiots; and they must have ended their lives, before they were fit to live. Their offspring come into the world under very different circumstances; and must obtain their knowledge by very different means, and under widely different circumstances. We must go through a tedious discipline in the school of experience. We must advance from weakness to strength, from ignorance to wisdom. Our acquisitions must be painfully collected, carefully preserved, and judiciously arranged; and out of this store, which want and ignorance have compelled us to accumulate, we must draw the treasures of mental riches. That our knowledge may be sure, it must be slowly acquired. We not only know nothing at first; but are apt to forget what we learn. Before it is firmly fixed in the mind, it has to be repeated a thousand times; and by habit and use we must learn to act upon it as a practical principle. It is thus that we acquire all the benefits of experience, and learn to contemplate the connection which subsists among the objects that surround us. These objects at first appear detached and insulated; and the memory is overloaded with unconnected facts; till at length, rendered familiar by use, and manageable by having perceived their connection, they become the elements of knowledge, and the ground-work of future improvement. The mind can then glance over its accumulated stores, with the quickness of intuition; and we are astonished at the celerity of our thoughts, forgetting the tedious process by which the objects of our knowledge have been rendered familiar to us, and the strong principle of connection which has been transferred to our ideas, from the analogy of Nature.

If this be a correct view of the subject; confirmed by every man's own experience who will review his past life, in reference to his acquisitions in knowledge; how inconsistent must these *superficial systems of education* appear:—systems, which their advocates would induce us to believe, require neither discipline, labor, nor pains, to acquire a knowledge of:—the whole a mere matter of *amusement* for young masters!

Every thing worth having, in this world, beyond the natural rights enjoyed in common with the inferior animals, has to be purchased at a price bearing some proportion to its intrinsic value; and knowledge and the proper exercise of our mental powers are

articles of too much value to be bought for a trifle. Grammar, for instance, the art of speaking and writing a language with propriety and accuracy, is an acquirement of too much importance to be obtained at the expense of attendance on a few lessons, or lectures; or committing to memory a few mechanical rules. Language is not merely the medium of communication. It is an instrument of thought. It is thought embodied; ideas made tangible; mind made visible;—it is the most correct representation of mind that the present state of man will admit of. So intimate is the connection between the philosophy of language and that of mind, they have never yet been separated, even by the talents of a Locke, a Reid, a Stewart, or a Brown. The study of language must therefore form an important part of education.

Mr. Locke recommends the study of mathematical science, not so much with a view to make mathematicians, as to make rational beings. And undoubtedly, the study of mathematics, particularly that of geometry, is calculated beyond all others to exercise and mature the reasoning and discriminating faculties. But these advantages are not to be obtained from the contracted compends, and abridgments translated from French authors, now so much in use. Indeed, if the object be merely to gain a knowledge of a few cardinal propositions in the lower geometry, the works alluded to are quite sufficient; but if the principal design be the attainment of the great object which Locke recommends,—then I maintain that the Elements of Euclid, as translated by Simson, or Playfair, is the only work in the English language fit for the purpose. It is to be lamented that the influence of *fashion* should find its way into *places of education;* yet so it is. For half a century after the publication of Newton's Principia, in 1687, the Synthetic mode of reasoning was so much the fashion, as to be used on many occasions when not at all suitable; but in consequence of the vast extension of improvements in the Analytic method, by Euler, La Grange, La Place, and others; and the amazing results in physical science thence obtained, the latter has obtained such an ascendancy in public estimation, as to cause the former to be in a great measure neglected. The truth is, they are converse operations of the mind; and each of them has its appropriate sphere of action. By the Synthetic mode, we reason from axioms, simple, self-evident truths, to those that are complex and obscure. We must compare our ideas, two by two, with an intermediate one, in order to be certain how far they agree, or disagree, with each other; and thus link, with indubitable certainty, a chain of thought, till we arrive at the wished for conclusion. This is the employment that brings into action the latent faculties of the mind; rivets the attention; sharpens the discriminating powers, and strengthens the judgment. Thus it is, that habits of attention and close reasoning are acquired; and these habits being once con-

firmed, the path is opened, in every direction, for a successful journey to the temple of science: and as far as forty years experience can be of any authority on the occasion, it is entirely in favor of Euclid, as preferable to any, or all other authors, for obtaining this invaluable purpose.

Another subject on which I would beg leave to offer a few remarks, is in reference to that circumscribed course of education, which has been frequently pursued by those intended for some particular profession. Youths are frequently destined, by their parents, or their own inclinations, to some particular profession or employment, long before their talents are so far developed, as to indicate their fitness for one sphere of action in preference to another; and their whole course of education is adjusted with a view to that object; and the young aspirant, with reluctance, devotes either time or attention to any subject not immediately connected with his intended profession.

Why should I trouble myself with such things? says one. I intend to be a farmer. Be it so, young man;—a little knowledge of Natural History, Chemistry and Botany, is easily obtained, and may prove highly useful even to a farmer. By the first, you may improve your *live stock;* by the second, your *soil*, and by the third, every species of *vegetation* that grows on your farm.

Need I tell the youth intended for a mechanical or manufacturing employment, that some knowledge of mechanical and chemical science would be greatly conducive to his success in any of the useful arts?

It would be easy to state a case, in which a counsellor at law would cut a very sorry figure at the bar, in consequence of his ignorance of surveying, navigation, or seamanship:—and equally easy to state another, in which he would gain lasting honor, by rescuing an innocent man, unjustly accused of homicide,—in consequence of his knowledge of anatomy, surgery and physiology. Might not the Physician and the Divine, by an extension of their academical studies, be rendered still more useful than they are, being qualified for an occasional interchange of the professional duties? When every effort of the "*Healing Art*" has been defeated by the King of Terrors, and the solemn tidings must be announced, *that there is no hope;*—would the physician be less esteemed, if his qualifications and his character, enabled him to strengthen and encourage *that hope*, which points to mansions of rest beyond the grave? Or, would the "*Sacred Office*" be less important, if its professors were so far acquainted with the arts of surgery and medicine, as to supply, in some emergencies, the place of a physician, until he could be procured?

Long experience, fellow-teachers, has enabled me to know much of the arduous task in which you are engaged; of the difficulties you have to encounter; the obstacles you have to surmount. But

you have put your hands to the plough, and must not look back. That institution, whose members I have the honor now to address, may do much towards obviating those difficulties, and removing those obstacles. Union, harmony, firmness, and perseverance, will, I trust, accomplish all you desire. But, if not, you will have the consolation to reflect that you have discharged, as far as in your power, the duties which you have undertaken. And should you even experience ingratitude in return for your exertions, you will have within your own breasts, a fund deposited, amply sufficient to remunerate you for all the toils and labor you have endured. The consciousness of having discharged an important duty to the rising generation, by preparing those entrusted to your care, for the several duties on which they must enter, when those by whom these duties are now discharged will be removed,—is a reward of which the world can never deprive you. Nor will the good you do be confined to the rising generation. This will communicate it to the next, and that to the next, and so on, without end.

As the good seed sown by the husbandman produces a crop,—a portion of which is consumed in its season, but a remnant is saved for the next seed-time, to produce another harvest, and so on in succession from year to year,—so the mental and moral seed you sow in the rising generation, will produce its harvest, and an augmented portion of that harvest be planted as seed in the next generation, and so on from age to age, till the stream of time is lost in the ocean of eternity.

REMARKS ON THE PRESERVATION OF HEALTH AMONG THE INMATES OF SCHOOLS AND COLLEGES.

NO. II.

BY WILLIAM WOOD, M. D.

Nothing is more productive of disease in crowded school-rooms than imperfect ventilation. This is especially the case in winter, when teachers generally think it advisable to keep their rooms almost air-tight, in order to exclude the cold from without; a practice which not only destroys feeble individuals, in early life, but also implants the seeds of premature decay in the most robust constitutions.

The blood, in its passage through the lungs, requires pure air to expel the poisonous matter which has been thrown into it in the course of its circulation. When it leaves the lungs, for distant parts, its color is a bright or scarlet red, but when it returns, it is changed into a dark modena; and the mass is termed black blood. The former is found in the arteries, and the latter in the veins. The red or arterial blood furnishes the materials for the growth of the body. It also carries whatever is necessary to replace the worn-out particles, which are constantly passing out of the system by means of the skin, lungs and other parts. On the other hand, the dark or venous blood is poisonous to every part of the animal, except the tubes and cavities in which it is found; and hence the necessity of a change in its constitution. This can only be accomplished by an atmospheric air, carrying with it a due proportion of oxygen or vital air, which is constantly diminished every time it passes through the lungs, and its place supplied by a poisonous compound which must be removed by additional quantities of oxygen. The necessity, therefore, for a constant supply of fresh air must be apparent. But how is this to be obtained in a room, crowded with pupils, and where the doors and windows are kept so completely closed, that it can neither gain admittance, nor can the offensive medium escape?

This, however, is not the only source of contamination in the atmosphere of school-rooms. There is more or less that is equally injurious, constantly passing off from the surface of the body. This mixes with the air, already more or less polluted, and thus the whole mass is speedily rendered entirely unfit for respiration.

All pupils will not be equally affected by confinement in close rooms. Those inclined to diseases of the lungs will suffer most; and I have no doubt that the seeds of consumption are often sown in the lungs of children predisposed, by hereditary structure, to the disease, by improper management during their education.

School-rooms, crowded manufactories, and other places where persons are daily congregated, should, therefore, be well ventilated, even in the coldest weather. They should also be so constructed that this ventilation would not be left to the fancy or caprice of teachers or master-workmen. As yet, a great majority of both are entirely ignorant of the various laws which govern the animal body either in health or disease.

As school-houses are now erected, even the imperfect ventilation they receive, in cold weather, is injurious to more or less of the scholars. The temperature of the room is frequently kept so high, that the pupils are thrown into a profuse perspiration, when the windows or doors are opened, and a flood of cold air is allowed to fill the house. This drives the blood from the surface, contracts the pores of the skin, and colds, pleurisies, or other diseases

of the lungs are the result, especially among those who are predisposed to consumption. Indeed, the rudiments of this fatal affection are generally implanted in the pulmonary organs at an early period; and it is more than probable that the discipline of the school-room contributes not a little towards the events.*

To be Continued.

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* While on the subject of respiration in the school-room, it may not be improper to remark that the atmosphere of the house is often loaded with fine particles of dust and sand, which are allowed to accumulate for the want of proper cleanliness. These pass into the lungs with the air, and there become blended with the mucus, where they remain until they are ejected by coughing. Indeed, it is possible for the air-passages to become so completely clogged with dust and mucus, that the atmosphere cannot find its way into portions of the lungs, and a fatal disease is the result. Scholars addicted to asthma, chronic cough, weak lungs, or even those who have a narrow chest, should not be allowed to sweep school-rooms, or remain in dusty situations.

For the same reason, school-rooms or large public offices should never have brick floors. The surface of the bricks is constantly being ground into an impalpable powder, which rises into the air by disturbance, and renders a stay in them not only unpleasant, but decidedly injurious, or even dangerous. The Clerk's and some of the other offices of this city, ought to be reformed in this respect. Visiters complain of dust on the books and papers, without at once thinking that those who have to stay there during the principal portion of their time, are almost the only sufferers. I could name a school-room in this city, where the floors, judging by the appearance of the surface, are almost converted (by what process I will leave my readers to judge) from wood, to sand and dust in the course of less than two years!

We would observe that all articles which have appeared in the Academician without *any* signature, with some one or two exceptions, are editorial; and that all which have had, or shall have, the signature W. are condensed by the editor from valuable works. The remark may be applied to all future articles.

Want of room has excluded several articles, and literary notices from this number.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS

FOR THE MONTH OF APRIL, 1837, TAKEN AT WOODWARD COLLEGE, CINCINNATI—BY JOSEPH RAY, M. D., PROF. MATH.

April 1837	Thermometer. min	max	m tp	Barom. mn ht inches	Course wind AM	PM.	charac'r wind	rain and snow.	charac'r weather.	Miscellany.
1	26.0	42.0	34.0	29.283	NW--NW		str. wd		fair	
2	32.0	63.0	50.7	29.120	S-SW		high wd		variable	
3	37.0	57.0	44.0	29.103	SW-W		lt. wd	1·25	cloudy	com. sn. 4 pm
4	32.0	48.0	39.3	28.950	NE-NE		lt. wd	·12	cloudy	snow 6 in. d'p
5	34.0	53.0	42.0	29.023	NE-NE		lt. wd		variable	
6	36.0	57.0	48.7	29.043	E-E		lt. wd		variable	snow disapp'd
7	38.0	65.0	49.7	28.666	S-SW		high wd	·06	variable	very windy
8	34.0	39.0	36.7	29.907	W-W		str. wd	·11	cloudy	snowy day
9	38.0	45.0	39,7	29.233	W-W		lt. wd		cloudy	slt sn. on gr'd
10	30.0	58.0	43.7	29.250	SW-SW		lt. wd		cloudy	in the morn'g-
11	34.0	67.0	48.5	29.390	W-W		lt. bre		clear	frost.
12	37.0	77.0	55.2	29.481	SW-SW		lt. bre		fair	
13	40.0	69.0	56.3	29.766	W--W		str. wd		fair	[blossom.
14	42.0	65.0	48.3	29.040	NW-NW		lt. wd		clear	peach trees in
15	36.0	78.0	61.7	28.991	W-W		high wd		fair	bh wd all day
16	44.0	57.0	46.3	29.050	W-W		high wd		variable	do do
17	34.0	51.0	39.3	29.193	W-W		high wd		cloudy	do do
18	38.0	61.0	48.2	29.263	W-W		high wd		fair	do do
19	45.0	68.0	56.3	29.260	W-SW		str. wd	·15	variable	
20	47.0	65.0	54.3	29.250	W--W		str, wd		fair	
21	43.0	63.0	50.3	29.366	W--NW		lt. wd		fair	aurora bore-
22	37.0	63.0	50.3	29.334	NE-NE		lt. wd		fair	alis.
23	34.0	49.0	40.0	29.297	NE—NE		lt. wd	·22	cloudy	hills cov. with
24	32.0	52.0	38.0	29.440	NE--NE		lt. wd		clear	snow at 1 p m
25	28.0	61.0	44.7	29.367	N-N		lt. wd		variable	heavy frost
26	34.0	60.0	44.2	29.297	NW-NW		lt. wd		fair	
27	31.0	67.0	50.0	29.361	NW-NW		lt. wd		fair	
28	37.0	76.0	58.7	29.461	W-W		lt. bre		clear	30th, cherries
29	51.0	86.0	68.8	29.410	W--W		lt. wd		clear	in blossom.
30	49.0	89.0	63.3	29.251	W--W		high wd	·09	variable	shower, at 6 p. m.

Mean temperature of the air (Fahrenheit's scale)	48°·3
Maximum height of thermometer	89°·0
Minimum height of thermometer	26°·0
Range of thermometer	63°·0
Warmest day, April 29th.	
Coldest day, April 1st.	
Mean height of barometer, (English inches,)	29·2062
Maximum height of barometer,	29·51
Minimum height of barometer,	28·58
Range of barometer,	·93

Perpendicular depth of rain and melted snow, 2 inches.

Direction of Wind.—N. 1 day—N. E. 5 days—E. 1 day—S. 1 day—S.W. 4 days—W. 13½ days—N. W. 4½ days.

Weather.—Clear and fair 15 days—variable 8 days—cloudy 7 days.

The latter part of this month was unusually dry, and the mean temperature of the whole month in comparison with the same month of other years, very low: a combination of these causes has greatly retarded the progress of vegetation.